

The Week

HOME 1-5
Polytechnic clearing house will start in 1986
Durham may waive fees for Palestinians
British Association meets in Sussex
New watchdog for private colleges

OVERSEAS 6
American colleges withdraw credit for African students
New trust to help Czechs
Israeli universities "cannot pay salaries"
Harvard will not help draft evaders with grants

ARTICLES 7-11
Karen Gold looks at the work of the Polish photographer Tomasz Sobocki; and Felicity Jones at IBM's in-service education at Cambridge, 7

Commonwealth Universities
Congress: Ngalo Crequer, John O'Leary and Peter Scott report from the 13th CUC held in Birmingham last week, 8-9

Anna Furth discusses the application of protein chemistry to industry and medicine, 10

Bruce Collins looks at the disillusionment among American blacks at the failed politics of the 1960s and 1970s, 11

BOOKS 12-16
John Prest reviews a biography of the Victorian prime minister Lord Aberdeen, 12

Two new books on women at work and Margaret Thatcher reviews Yeats's poems and John Dixon Hunt considers the origins of Romanticism (14), David Levy reviews The Modern Liberal Theory of Man by Gerald Gaus (15), and Bruce Wheaton four volumes of a new history of quantum theory (16)

NOTICEBOARD 17

CLASSIFIED INDEX 18

OPINION 22-24

Tessa Blackstone reflects on holidays; Jean Bockoc of Natthe discusses recent ideas for reforming courses in higher education; and Don's Diary from Margaret Christie of the University of Bradford, 22

Letters on research students' complaints, peer review league tables, and the University of Buckingham; and "Union View" from George Stewart of the Scottish Further Education Association

Next Week

Philip Thody on getting promoted Bernard Bergonzi on Conrad's letters, 12
For and against parapsychology: Boris Ford chooses Shakespeare in 'Millennium'
Yuri Lyubimov in London

Next week's features
The week's features include a special fund being set up at Cambridge University to ensure that leading American chemists are not put off from researching there because of low British salaries. Academics and union officials have become increasingly worried about the effects of growing salary differentials on joint international research. A tenured academic at Harvard University is currently paid about \$50,000 (£23,000) a year. A professor in Britain receives £20,300 a year on average, while most lecturers receive £13,000-£14,000.



HIGHER EDUCATION SUPPLEMENT
Priory House, St John's Lane, London EC1M 4BX. Telephone 01-253 3000

The achievement of Robbins IV

A broken treaty with the State?

The fourth broad objective of university development since 1945 was to establish a new relationship with lay society. The Robbins Committee had no doubt about the solemn obligation of universities to contribute to a broader mission of education that simply educating students to fulfil socio-economic roles after graduation and advancing the frontiers of knowledge. The committee's fourth objective of higher education was "the transmission of a common culture and common standards of citizenship". It was the responsibility of higher education, in partnership with the schools and the family, to provide "that background of culture and social habit upon which a healthy society depends".

But in the course of the 1950s and 1960s this traditional view of the university's obligation to sustain high culture was modified in two important respects. The first was the growing self-confidence of the academic profession. The phrase "donnish dominion" is A. H. Halsey's and it accurately and eloquently evokes the power that the academic profession in Britain came to enjoy after 1945 and especially during the 1960s. Yet this outcome would have been difficult to predict in the middle of the nineteenth century when the de-syncretism of a modern university was established by lay society even if they were later to come under the commanding influence of the dons.

Universities were established by lay society even if they were later to come under the commanding influence of the dons. The early or easy consolidation of the academic profession because only a few senior professors could be offered secure jobs and properly rewarded careers and universities remained dependent on philanthropy, industrial sponsorship, and student fees.

For this reason they remained for a long time subservient to industrial and other lay benefactors, whose expectations were very down-to-earth. Only Oxford and Cambridge had the social eminence and so independence to pursue the more elevated roles of scholarship and pedagogy. For the rest it was "useful" science and technical training. As in the rest of Europe and the United States the theoretical sciences grew out of the practical sciences rather than the other way round - artillerymen became mathematicians and later physicists (and back to artillerymen, some would add, in the nuclear age).

In Britain two special factors intensified the practical bias of the early modern university. The first was the pragmatism of the British intellectual tradition; the second the fact that universities, although sponsored by the state, were not maintained or controlled by the state and their teachers were not as in so many countries: civil servants.

In the nineteenth century both these factors discouraged the consolidation of the academic profession; in the twentieth they had the opposite effect. The pragmatism of the British intellectual tradition inhibited the development of an oppositional intelligentsia which might make its natural home in higher education and so provoke the suspicion of established society. As a result the state saw no reason to distrust the growing autonomy of higher education which was a precondition of the "donnish dominion". This may help to explain a puzzling paradox: the exceptional autonomy enjoyed by British universities, and the almost an exceptional degree of solidarity between higher education and political society.

The second factor that a singularly strong state's lack of a strong

financial interest in the early universities allowed them to develop remarkably autonomous forms of government, which have been maintained even though the state has become the only serious source of income for most universities.

The outcome was that in the twentieth century the state and the academic profession became allies, even if they did not always recognize each other's support. The keys to the successful consolidation of the academic profession in Britain can perhaps be found in the two factors already mentioned. Higher education's commitment to practical sciences, which was reinforced by the pragmatism of the British intellectual tradition, not only meant that the forms of knowledge being produced by the nineteenth-century university were not seen as at all dangerous or subversive but as an essential support for an industrializing society. In the twentieth century this latter aspect received even greater emphasis because of the growing importance attached to scientific knowledge of all kinds, and to its technical application. So the state had a growing incentive to give a growing subsidy to such an obviously beneficial activity.

This heightened appreciation of the potential contribution of higher education to the state's financial interests was not to reduce the autonomy of the universities but rather to enhance it. For state grants were not only introduced as an alternative source of income to industrial subsidy, but also encouraged industry to invest in higher education for reasons very similar to those which the state had found so persuasive. Only in the last 25 years has industry dropped out.

The second modification to the traditional view of the university's responsibility to lay society, and the much closer engagement of the university with immediate social issues, seemed at first sight to contradict the first, the rise of the "donnish dominion". For through the 1950s and 1960s public expectations of the practical utility of universities increased. A large part of this was the new enthusiasm for science and technology. Universities as the producers of nearly all the technology inevitably became the focus of greater public attention.

At the same time Robbins' "background of culture and social habit" for which universities bore a tripartite responsibility with the schools and the family underwent a social democratic revision. To the extent that post-war British society accepted that the creation of a greater equality had become a legitimate and overriding aim of public life, the universities were expected to adapt to this new priority.

Just as the late Victorian university had had to accept that lay society expected it to produce the future cadres of administration and empire, so the post-war university had to accept that the creation of greater equality had to be incorporated in some way within the traditional goals of the university. As the thrust to equality was most obviously expressed through improved access and facilities, the objectives which the majority of the academic profession shared, this presented little difficulty.

So the conflict between these two modern goals of autonomy and engagement was probably much less than might have been expected. The "donnish dominion" was largely

based on the ability of the universities to satisfy the scientific and manpower demands of both the state and of industry. It had been established with the acquiescence of rather than in opposition to lay society. In no sense did it represent a successfully contested claim to stand aside, either as the critic or as the guardian of high culture in the face of mass society.

This new relationship that developed between universities and society after 1945, the fourth objective of university development, had two prominent features. First, the universities not only accepted but welcomed the view that they should be, in Flexner's phrase, "an expression of the age". Far from discouraging public expectations of their utility, they encouraged them. But, second, the academic profession believed that it possessed the authority and the expertise to control the terms on which these very welcome exchanges should take place.

This final objective, the moulding of a new relationship between the universities and lay society, has been discussed last week within the context of the growth of a research culture. The broad pattern is clear. In intrinsic terms universities became more autonomous. Lay participation in their government declined still

It is interesting to note that the representation of lay interests is much less adequate in the constitutions of the new universities established during the 1960s than it had been in the case of the civic universities established a century earlier. No doubt this devaluation of the lay voice within universities merely represented the increased status of the academic profession which no longer saw itself as so dependent on the opinions of those outside the universities, a conceit some would argue in the light of more recent events.

But that is only half the story. In intrinsic terms universities may have become more autonomous; in extrinsic terms they have become more engaged in or dependent on the practical world. In fact equal weight needs to be given to both engagement and dependence. The second has been overemphasized at the expense of the first.

This growing dependence, which appears so negative and involuntary to many in the universities, has to be balanced by their increasing engagement in lay affairs, which was more positive and essentially voluntary. Indeed the development of many technology subjects and many of the applied social sciences can only be viewed in this second context. They were not forced on the university by the state but offered willingly. The whole process of expansion in the 1960s and 1970s is only comprehensible in terms of the growing engagement of the universities.

The same pattern can be observed in research. It is misleading to claim that the growing enthusiasm for applied as opposed to pure research, and even for Lord Rothschild's customer-contractor principle, came entirely from outside the university. The recent debate within the social sciences about whether the Social Sciences Research Council was right to reorganize its subordinate committees in terms of problems and issues rather than disciplines, has highlighted this process of engagement.

The title of these four articles - "The broken treaty" - is justified in the light of the post-war development of British universities. The great expansion of the number of students and increase in the num-

ber of university institutions was undoubtedly a considerable achievement. But it was also a controlled achievement in the sense that its effects were carefully contained.

The development of the universities stopped short of that point beyond which fundamental questions would have had to be asked about the purposes of university education. It was precisely because the Robbins achievement, so impressive quantitatively, was comparatively modest qualitatively that the binary pole and the polytechnics became new able.

But if a lot less happened in the "public life" of the universities than appeared in the middle of the last long expansion of the 1950s and 1970s, a lot more happened in the "private life" than many supposed at the time. Universities abandoned their traditional commitment to the teaching of the decline of the disciplines and the specialization of disciplines intensified, despite the misgivings of the Robbins committee. This process was accelerated by the growth of strong research culture.

So the broad picture of Robbins that emerges 20 years later is one of a controlled achievement and limited nostalgia. The achievement is not as available but certainly some things went wrong: liberal higher education was not re-established in terms of the world; there was some movement towards the development of an intelligentsia based on a stronger search culture; and the treaty between the state and the universities first established after the first world war and massively endorsed after the second showed signs of breaking down.

Yet these disappointments can be easily defined as the inevitable pains of readjustment or even growth. Where Robbins failed it was because the committee was trying to swim against a tide of deep currents in intellectual life, and the industrial economy, and in post-war society. To label these as "mistakes" seems profoundly naive, because it implies that they could have been avoided. The abiding impression of Robbins, looking back over 20 years, is of freshness and an integrity not more than ever in the day years of the 1960s. In Adam Bede Eliot writes nostalgically of the Methodist, a lingering alien from the time when Wesley and his fellow-labourer fed on the hips and haws of the Cornish hedges, and exhausting limbs and lungs in carrying a divine message to the poor.

She continues: "That after-glow has long faded away; and the picture we are apt to make of Methodism in our imagination is not an amorphous green hills, or the deep shade of broad-leaved sycamores, where a crowd of rough men and women, hearted women drank in a faith, a thing more than low-pitched piety, up-dirty streets, a sleek growth of sponging preachers and hypocrites, regarded as an exhaustive analysis of Methodism in many fashionable quarters."

The next words in Adam Bede are "that would be a pity". So it would. Perhaps we should reject the notion of "fashionable quarters" and get back to the primitive Robbins.

Peter Scott

● Laurie Taylor will be back next week.

The Times Higher Education Supplement

September 2, 1983 No 565 Price 50p

Doomed colleges are given two weeks to appeal

by John O'Leary

Some half dozen colleges were this week given a fortnight to justify their existence as the National Advisory Body secretariat issued its proposals for a redistribution of places in the public sector. A number of other colleges concentrating on non-advanced work are recommended to lose their higher education courses but would not be in danger of closure.

Among those whose future is in doubt in Nonington College, near Dover, which narrowly escaped the axe in the teacher training cuts imposed by the last Labour Government. Mr Stanley Beaumont, the principal, said that he was still informing staff of the NAB warning and would be meeting Kent education officials before making any comment.

The college lost its teacher education courses in cuts ordered in 1977, but has continued with drama and physical education courses validated by the University of Kent. The county supported Nonington's case for survival as its only predominantly higher education institution.

The NAB plan also suggests that Hertfordshire College of Higher Education should be merged with Hatfield Polytechnic.

Both colleges are the victims of the secretary's attempt to steer provision away from the south-east of England towards East Anglia and the

north, and to put more resources into part-time and sub-degree work. The names of the colleges which have received an additional letter warning that their future was under consideration are being kept secret by the NAB, but it is understood that no polytechnic is under threat.

Mr Christopher Ball, chairman of the NAB board, said this week: "It would be a mistake to think that the plan constitutes NAB's advice. There is still a long way to go and this is just the first step. In any case, I think we all recognize that this planning exercise should be seen as the first round in such exercises and, if the first step is in the right direction, which I think it is, I shall be satisfied."

The overall plan allows for 256,000 students, a 5.8 per cent increase on 1982/83, with the total for the advanced further education pool remaining almost constant at £560.6m. This would mean the loss of between 5,000 and 10,000 new places next year, although the large numbers of students going on to second and third years of courses accounts for the increased total.

The projections are likely to be reworked before the NAB board meets to discuss the plan next month because Sir Keith Joseph, Secretary of State for Education and Science, is expected to find some additional money to maintain access and preserve standards in



polytechnics and colleges. However, Mr John Bevan, the NAB secretary, said that a favourable response from Sir Keith would not remove the need for closures completely.

Of more than 200 institutions directly involved in the NAB exercise, 92 have been notified of proposals to alter the number of places by more than 10 per cent in one or more of their academic programmes.

The biggest changes are in the humanities, which would be expected to cut new enrolments by 12 per cent next year, and in computer studies,

which are in line for an increase of 23 per cent.

The balance is also expected to alter in both the mode and level of courses in the public sector. The plan includes an increase of 6,000 places on sub-degree courses and boosts part-time numbers by 7 per cent over two years. Most of the new places will come outside the polytechnics, since it was the colleges and institutes which put in "bids" in these areas.

Leader, back page
Letters, page 23

Local firms fight plan to expand science park

by Ngalo Crequer

Seven Birmingham firms face removal or compulsory purchase to allow Aston University science park to go ahead with a 24-acre expansion plan.

The firms are all well-established and between them employ up to 300 people. They have pledged to fight the proposals which are now likely to go to a public inquiry.

The plans are for a high technology development including a research institute, industrial and residential buildings and social amenities such as a public house, a wine bar, a restaurant, a bank and shops.

The site is partly owned by Birmingham City Council but is mainly owned by the businesses. It is a quarter of a

mile from the city centre, near the Aston expressway. The plans are for a later phase of the science park - the first phase opened last month.

The science park is run by Birmingham Technology Ltd, a company comprising Lloyds Bank, the university and the city. Last week the city council's planning committee, on the advice of city planning officers, gave the scheme outline planning approval, despite the objections.

The council will now try to "negotiate" the objections and there may be financial aid from the council's economic development council, or it will seek compulsory purchase orders.

The firms involved include Ernest Newton Ltd, a chemical distributive

company and two subsidiaries, which has been in the area for over 100 years; the Greater Midlands Co-operative Society, which has offices, accounts branch and a funeral service; Ansell's Properties, which has three public houses; Derrington and Sons, a builders' merchants; and the Birmingham Post & Mail garage.

Mr Peter Burrows, the managing director of Ernest Newton Ltd said that too much land was being allocated for the science park. "We have a lot of people here in secure employment. It seems wrong to sacrifice them for high risk high technology," he said.

"We were given permission for a new office block two years ago and we have just put that up and spent a lot of money on extending and refurbishing our works. We are a local firm, with local customers, and we don't know where they would relocate a chemical firm."

The Co-op said some of its business had been in the area for 50 years and had spent a great deal of money on refurbishing. Their objection was based on the expense and disruption.

Mr Julian Ingleby, development manager of Birmingham Technology Ltd, said: "The area is ripe for development. I see that there is the difficulty of displacing either families or industry in redevelopment. The onus is on the city to provide alternative accommodation. We are not in the business of putting people out of work."

American chemists lured to Cambridge

by Paul Flather

A special fund is being set up at Cambridge University to ensure that leading American chemists are not put off from researching there because of low British salaries.

Academics and union officials have become increasingly worried about the effects of growing salary differentials on joint international research. A tenured academic at Harvard University is currently paid about \$50,000 (£23,000) a year. A professor in Britain receives £20,300 a year on average, while most lecturers receive £13,000-£14,000.

The Herschel Smith Fellowship Fund will allow a leading US chemistry researcher to spend one to two years working with top British chemists in the Cambridge laboratories, which have long enjoyed a world-wide reputation.

The fund is being created with a \$500,000 (£230,000) endowment from

Dr Herschel Smith, a renowned chemist and former Cambridge graduate, who did seminal work on synthetic steroids. He earned his money from holding master patents for what became popular contraceptive pills.

Professor R. A. Raphael, head of the university department of organic and inorganic chemistry, said senior US academics had not been coming to Cambridge for extensive periods of research for at least 10 years.

"One reason we feel has been that the rate of payment we can offer here is rather low by US standards. This is compounded by the cost of living which is also generally higher," he said.

He outlined there was always a queue of "good people" wanting to spend time in research, but they came for short periods and could not get fully involved. Recent US visitors included Professor Roald Hoffmann of Cornell University, a Nobel Prize winner; Professor Mike Cava of Pennsylvania University; and Professor G. Stork of

Columbia University.

"We feel this will be a channel for us to get personal know-how of what is happening there," Professor Raphael said. "We must reinforce our close contacts."

The fund still needs final approval but it already has the support of the university general board. It hopes to advertise a post next year for work on one of the major interests at Cambridge, the organic synthesis of complex compounds.

Professor Raphael said there was a "general gut feeling" in the university that British salaries were now on the low, compared worldwide. Mr John Akker, deputy general secretary of the Association of University Teachers, said this point was made frequently to Government ministers.

"We are not surprised Cambridge academics have decided to set up this fund. What is at risk the growing salary differentials is international collaboration in research."

ARC may move out of town

by Jon Turney
Science Correspondent

Headquarters staff of the Agricultural Research Council, already faced with budget cuts and probable redundancies, may have to move out of London to keep their jobs. Swindon, Reading and Merseyside are three of six options analysed in a consultants' report on location of the ARC office now before the council.

The other three options are the London Docklands, which shares a host of government incentive schemes with Merseyside, a site in outer London, and staying in the existing offices in Great Portland Street.

Two reports this year have commented on the expense of maintaining the ARC's 160-strong administrative staff in central London. But the report commissioned by the council found that none of the other options are significantly cheaper in the short term.

Both the Joint Consultative Organization, which advises the Ministry of Agriculture, and the House of Commons Select Committee on Agriculture have recommended a unified administration for the agricultural research now run by the ARC and the ministry, based outside London.

The Government's response to these more sweeping recommendations is likely to overtake the ARC's discussion of its own offices. However, the council considered the consultants' report in June and intends to come to a decision in October.

A move to Swindon would bring the ARC closer to the Science and Engineering Research Councils, Reading, roughly mid-way between the two, is a centre of agricultural research and policy-making. If the ARC does leave London, only the Medical Research Council and the much smaller Social Science Research Council would be left there.

Hardly a drain on resources

The drain of biotechnologists from Britain is nearer to a trickle than a flood. Preliminary results from the "brain-drain" study under way at the Institute of Manpower Studies at Sussex University suggest that loss of researchers to overseas laboratories will not seriously hamper expansion of British biotechnology.

The IMS team have identified more than 100 British-trained biotechnologists who have gone to work abroad in the last five years or so. The information came in response to press announcements and advertisements.

Nearly two thirds of the emigrants have already replied to a follow-up questionnaire to find out why they left and the final returns should be higher still.

The results of the questionnaire are now being analysed. They will help distinguish researchers simply gaining experience in foreign laboratories from scientists who have left for good.

The IMS estimates the total pool of biotechnologists in the country at well over 1,000. These, together with newly trained researchers, should be enough to meet likely demand from industry. The Royal Society estimated last year that 1,000 new postgraduate students in biotechnology would be needed over the next 10 years, and the Sussex team is also putting together a survey of future need which is likely to produce similar figures.

NUS plans new grants campaign

by David Jobbins

Student leaders are shaping their demands for increased student awards for the 1984/85 academic year in the face of continued constraints on education spending.

The claim, to be announced in October as the opening shot in the National Union of Students' grants campaign, is expected to follow closely the innovative pattern established last year.

The NUS executive was eager to rally its 1.2 million members around a clearly identifiable aim of £5 a week extra on the main rate of grant instead of a percentage. The union also sought a £25 a week minimum and a £9,000 threshold for parental income before grants are reduced.

Faced with the determination of ministers to keep as tight a rein as possible on non-cash limited spending, they failed to win more than a 4 per cent increase on the main rate. There was no apparent movement on the idea of a minimum award and the increase in the parental threshold, to £8,000, was attributable more to the pressure from anxious Conservative backbenchers in a pre-election period.

This year NUS will be able to draw on the results of its £50,000 study of student income and spending patterns when it fixes its claim. The survey's conclusions are likely to have more effect in setting a figure for the "flat rate" increase in the main rate of grant, with most of the argument within the executive centring on whether it would be more effective to express the amount in weekly or termly figures. Feeling is that most students gauge their income and expenditure over academic terms, while a weekly figure is useful as a public relations device in getting the case over to the general public.

A demand for a minimum grant is to be included, and although the precise figure is to be determined it is expected to be in the region of £30 a week. But much depends on the predicted levels of allowance paid to Youth Training Scheme students. NUS is anxious to minimize the potential gap between YTS trainees on an allowance and further education students who may receive no state aid at all.

NUS leaders are less optimistic about securing an increase in the parental contribution threshold this year than in the pre-election period. They feel ministers may feel under less of an obligation to backbenchers after the election victory.

Although plans for wide-ranging changes to the system of student travel awards were aborted by the election, student leaders are acutely aware that the commitment to a review remains. They fear that there will renewed attempts to dismantle this part of the awards system, and most fear the introduction of a flat rate element in place of the present system of individual claims for expenses incurred. The minimum grant, presently £410, which all students receive, regardless of parental income, is also something which could be on ministers' hit lists in the coming year.

Graduates on loan to small companies

Glasgow University is pioneering a scheme to introduce graduates to small businesses.

From the middle of this month, a dozen graduates, funded by the Manpower Services Commission, will be "loaned" to firms for a six-month period to help solve specific problems. Mr John Lewis, senior lecturer in Glasgow's management studies department, and co-ordinator of the Graduate Extension Programme, said: "At the moment, it is incredibly difficult for graduates to get employed by small firms, even firms with 200 employees. These companies don't come to universities on the milk round, and they're very scared of taking graduates because of their complete inexperience and the cost involved."

Graduates themselves were often unaware of opportunities in small companies.



Moving pictures: two of the many student companies trying their luck on the Edinburgh Festival's ever-expanding fringe. Duncan Whitman (right) brought his "ready-wrapped sculpture show" to the festival with the aid of an £1,100 grant from Leicester Polytechnic students' union. The National Student Theatre Company (above) put on a production of Sternheim's satire *Die Hose*.

Women face tougher battle

by Ngaio Crequer

Women students are having greater difficulty than men in finding a university place, according to the Universities Central Council on Admissions.

They also confirm what many students are now finding out for themselves, that grades need to be much higher. In the statistical supplement for 1981/82 UCCA says that compared with the previous year, there was an increase of about 5 per cent (from 149,330 to 156,675) in home candidates, but reduction of 17 per cent (from 17,766 to 14,821) in overseas candidates.

But home acceptances were lower by about 5 per cent and overseas acceptance lower by about 12 per cent. So home students have found it much more difficult than overseas to find a place.

The figures also show that between 1980 and 1982 every subject showed an increase in A level score, that is, standards of grades were higher. There was also a 17 per cent increase in the numbers of people achieving at least two A level passes.

Subjects showing the biggest leaps in

grades over the last two years include electrical and mechanical engineering, mathematics, computer science, combinations of biological and physical sciences, geography and some arts combination courses.

UCCA says that it also appears that candidates are aware of the difficulties of entering high-demand subjects, and here the scores are correspondingly larger.

There are also fewer women admitted and referred to another place in clearing, which UCCA says means that it is now slightly more difficult for them to find a place than men.

Home candidates also tend to be slightly younger than the previous year, although among the overseas there were more over the age of 23.

For home candidates, between 1978/82 there was a 26 per cent increase in 19-year-olds and a 22 per cent increase in 18-year-olds. There was also a 13 per cent increase in those aged 40 or over, but generally decreases in applications from those aged between 22 and 40.

UCCA says: "In spite of the hope in some quarters of an increase in admissions of older students it is apparent that fewer such candidates are coming

forward. This cannot be explained by demographic changes; in fact the nationwide numbers in these age groups increased."

There have also been substantial swings in the regions from which home candidates have applied. For example in Greater London in 1979 there was a 14 per cent increase in applications, which went down to 7 per cent in 1980 and up to 17 per cent in 1981. East Anglia has shown a steady increase, from 10 to 15 to 22 per cent. Yorkshire and Humberside region has gone from 6 to 9 to 14 per cent and Wales from 4 to 7 to 10 per cent.

UCCA has also listed the most popular subjects for home candidates over the last four years. Computer science, physics and mathematics are at the top of the popularity list, geography, history and sociology have done better than last year, mechanical and civil engineering are at the bottom and architecture does not get on the list.

The Statistical Supplement to the Twentieth Report 1981/82 published by the Universities Central Council on Admissions, PO Box 28, Cheltenham, Glos GL50 1HY. Price £2.50.

Report urges setting up of centres

Regional centres for education and training development should be established to ensure coordination of scarce resources, a Council for Educational Technology report urges this week.

The report is based on a project carried out in Bedfordshire, Buckinghamshire, Hertfordshire, Norfolk and Suffolk.

Such councils would decide policy and needs for their regions and facilitate curriculum development and educational technology developments for both educational and training concerns.

The report proposes that they should be supported by regional specialist committees and their activities implemented by existing agencies in the local education authorities, such as education departments, higher education institutions and by co-operating with museums and libraries, industry and local broadcasting networks.

Within such a structure, the report envisages a two-tier regional management structure composed at one level of senior education officers representing each of the member authorities and a second tier composed of officers or agencies coordinating information.

Regional Co-ordination of Educational Technology Arrangements by J. H. Embled, CEA Working Paper 23, available from CEA, 1, Devonshire Street, London WC1E 6ES.

More room to park than meets the eye

by Jon Turney
Science Correspondent

The consultants for two new science parks in the north of England made last week that there was more successful science park than a collection of attractive buildings near the campus.

Charles Monck and Nick Segal of the national small business conference at Durham University that studies under way for English industrial estate in Newcastle-upon-Tyne and at York University. Both are examining the feasibility of high-technology developments - linked to the one university, York and also aimed at transferring technology from all the higher education institutions around Newcastle to small firms.

From these and other studies of existing schemes, they warned of the dangers of relying on the drawing power of high-class buildings to generate a successful development. Building were vital as a focus for campus-based exploitation of technology, and helped the outside world identify the academic institution's commercial centre.

"Once a university has its science park, the motivation is greatly enhanced for it to get its act together with respect to linkages with industry."

Property was expensive to design and build, however, and the cost could distract attention from the more subtle management problems of a successful park. It could even place such projects on rental income that the landlords would not worry about getting the right kind of tenants.

It was clear from science parks in other countries, especially the United States, that successful academic-industrial links did not just happen naturally once a scheme was launched, they had to be found for management, marketing and promotion, as well as property investment.

All this would be hard to justify in commercial terms, and Segal and Monck foresaw a growing trend towards government sponsorship by local and central government, development agencies and higher education institutions, as well as private corporations.

Computer growth

Sponsors and researchers are both pleased with the first year's work of the International Computers Ltd's university research council. The company is set to increase the money it puts into the scheme in the second and subsequent years.

The ICL council was set up last year to help the company get ahead in products which might emerge from work in which university researchers take the lead.

Historians set up 'invisible college'

by Paul Flather

A new social history centre based in Oxford is to be launched this autumn to promote changes in history teaching and to act as an "invisible college" supporting historians in the face of economic and ideological attack.

The manifesto of the History Workshop Centre for Social History says "the status and purpose of history, as of other liberal studies, is being jeopardized today by cuts in higher education."

The economic effect has been a virtual block on recruitment of young scholars, while ideologically education is being turned into a commodity, the manifesto says. "The subject and a whole generation of potential historians are now at risk."

The centre's work is bound to fuel the growing national debate about teaching "British history". It is being backed by a large group of well known academics including Keith Thomas, Christopher Hill, Stuart Hall, A. H. Halsey, Joan Thirk, Barbara Taylor, Joseph Needham, Eric Hobsbawm, Raymond Williams and Charles Webster, director of the Wellcome Trust history of medicine unit.

One of its first major conferences will look at the question of patriotism, both as an issue of the day and as a reaction to recent statements on history teaching by Sir Keith Joseph, the Secretary of State for Education, and Lord Thomas, the Conservative historian Hugh Thomas.

Sir Keith commenting on proposed criteria for 16-plus examinations in history, said "one of the aims of studying history is to understand the development of shared values which are a distinctive feature of British society and culture."

Lord Thomas has also called for more patriotic history teaching in schools, placing Britain at the centre of the picture more in the style of French history teaching. He wants immigrants to be given a sense of the country they live in.

Professor Hill, reacting to the statements, has said everything in the British democratic tradition has been against allowing the state to dictate what history we shall study.

The new centre hopes to promote an approach of "total" history, breaking down disciplinary barriers. It aims to change the direction of history teaching, and to unite academic historians in the arts, the media subjects, theatre and literature, publish pamphlets and organize meetings.

Mr Raphael Samuel, a lecturer at Ruskin College, Oxford, one of the centre's trustees hopes it will act as an invisible college supporting historians at all levels, scholars, as well as part-timers and enthusiasts.

"We are very concerned about the hemorrhage of young historians forced to go abroad to get jobs. We want to go beyond a defensive response to cuts and expand the ambition of historical scholarship," he said.

Professor Hall said the creation of the centre was another sign of the general politicization now occurring. "People involved in history have to become more responsible about how it is used as a background to current political debates."

The centre's first activity will be a workshop on the origins of the National Health Service for health workers next January, followed by workshops on nineteenth-century liberalism and popular literature. The patriotism conference is in March.

Libraries told to help jobless

Public libraries are urged to publicize and expand their educational guidance and advice facilities for the unemployed in a key policy statement from the Library Association this week.

The statement points out that many of the groups affected by unemployment are not traditional users, for example young people, ethnic minorities, the disabled and unskilled.

"Therefore particular efforts are needed to show them the help, advice and information available to them through the public library service and through other types of libraries," the association says.

It stresses that the expansion of guidance and advice to help the unemployed retrain and find jobs should be carried out in cooperation with other agencies.

"Guidance and advice should involve special help in getting back to work, finding jobs, setting up a business, retraining or finding suitable opportunities for voluntary work", says the association.

Another task highlighted by the LA is the improvement of public awareness about the facts and background to unemployment, including the massive changes underway in society in general, and the specific impact this is having on individuals, the family and the community.

Libraries should also help unemployed people and their families to secure the welfare rights to which they are entitled and assist them to make creative use of their time.

Overseas news Nuclear data plan slammed

Academics and journalists testifying at US Department of Energy hearings in Washington said a proposal to restrict access to unclassified nuclear research "goes far beyond" what Congress had in mind when it voted to amend the Atomic Energy Act last January.

The Reagan administration is seeking \$100,000 fines and 20 year prison sentences for anyone disclosing "unclassified controlled nuclear information."

The government claims the measures are necessary to keep such data out of the hands of "terrorist types of people" who could fashion their own atomic weapons or sabotage nuclear facilities or shipments.

Representatives from the American Council on Education, the Association of State Universities and Land-Grant Colleges said at the hearings that the proposal amounted to nothing more than attempts to gather up information already in the public domain and to control access to it.

Any material produced by or for the government that could "provide important insights into nuclear material production and processing" would fall under the regulations. Council for the American Society of Newspaper Editors said the law would limit the public's right to know about environmental and personal safety hazards related to nuclear development.

from E. Patrick McQuaid
CAMBRIDGE, MASS

In response to a spate of criticisms of America's state schools, the presidents of the leading research universities and executives with influential foundations and professional associations have promised to forge stronger ties with the schools.

The scholars, issuing a statement after an unusual three-day convocation at the Pajaro Dunes resort in northern California, also urged government at all levels to assert a responsibility. "Federal support, as well as assistance from state and local government, will be essential for real improvement," they said.

Attending the assembly were the presidents of Harvard, Stanford, Chicago, Wisconsin, Michigan and Columbia universities, the heads of education colleges at Harvard, Columbia, Stanford and the University of California at Berkeley, as well as the presidents of the Carnegie Foundation for the Advancement of Teaching, the New York Times Company Foundation and the Association of American Universities.

Among the initiatives the group said its institutions would undertake were bolstering direct ties with the schools; improving teacher education; enrichment programmes for students and



David Bromley, senior lecturer in expressive arts at Bretton Hall College, is appearing in a one-man show next week at the Edinburgh Festival Fringe. He originally devised the show, "Won't Get Fooled Again", for a group of Inter Arts students at the college as part of their course. It is a monologue about the world of a socially deprived and rebellious adolescent, and draws on events from David Bromley's own schooldays. He will also give a performance on October 7 at the Leeds Fringe Festival.

Unions divided over Youth Training Scheme

by David Jobbins

TUC delegates face a stark choice next week between reconsidering the extent of trade union support for the Manpower Services Commission or seeking detailed improvements in the Youth Training Scheme.

Efforts to reach a consensus between all the trade unions which had submitted motions and amendments for debate in Blackpool have reached deadlock. The impasse was reached as another 40 trainee places with a local authority were lost because of trade union demands for "the rate for the job".

Leicestershire County Council was prepared to top up the £25-a-week allowance by £7.49 to bring it to £32.49 - the highest trainees can earn without becoming liable to national insurance contributions and possible income tax deductions.

The manual unions were prepared to accept this and 70 places in this area are to go ahead. But the National and Local Government Officers' Association, whose conference adopted a "rate for the job or no agreement" policy earlier this summer held out for £52 a week, which the county was not prepared to pay.

Now the TUC will discuss first a composite of resolutions from teacher and other white collar unions expressing overall support for the original aims of the YTS but calling for pressure to secure improvements in the educational and trade union aspects of the scheme.

This composite will be moved by the National Association of Teachers in

Further and Higher Education. It is likely to receive overwhelming support and the congress will then go on to discuss a second composite based on a highly critical motion submitted by the National Graphical Association.

The NGA criticizes schemes such as the YTS for raising false expectations among young unemployed people. Crucially it calls on the congress to instruct the general council to reconsider its involvement in the scheme and cooperation with Government policies designed to lower wages and create a pool of cheap labour.

This policy is so far out of step that composing it proved impossible. The NGA refused to accept an amendment from the Civil Service Union seeking continued cooperation with the MSC over the youth scheme while pressing for criticisms to be rectified.

The teacher unions and, if the first composite is accepted, the rest of the conference, are expected to support the CSU's line. The general council's position remains unclear.

Mr John Sheldon, general secretary of the CSU, which represents about 1,500 MSC employees, mainly skill-centre instructors, said: "We object to the NGA pointing to the YTS in isolation to make a general point about the MSC and what we wanted to do was to change this to accepting there are criticisms but that the trade union members of the commission should be supported in trying to change things from within."

Practice continues to make perfect

by Felicity Jones

A report on good practice in continuing education and training in Britain has been published as part of a broad study being carried out under the wing of the European Centre for the Development of Vocational Training (Cedefop), involving eight of the EEC countries.

The investigation in this country has been made by Surrey University's department of educational studies. EEC member states were asked to concentrate on the three priority themes of training initiatives in response to new technologies; within companies in response to the threat of unemployment; and initiatives to assist the unemployed, particularly long term.

The report found that the foundations in Britain for a system of a periodical return to education and training during a person's life are being laid in provision for all age groups.

But some major problems are presenting themselves in the midst of massive changes in quantity and emphasis in post-16 education and training. First, in the problem of the continuing inadequacy of the provision for the long-term and adult unemployed the report finds that the "measures and programmes are both limited in scope and controversial in nature, despite the rapidly increasing scale of the need".

Second there is a feared impact of "self-financing" courses. The increasing emphasis upon these may exclude those learners and companies which could most benefit from them, the report says.

There should also be more serious treatment given to the longer term issues which arise from a post-industrial era when education for "constructive occupation lying outside traditional forms of work", is becoming more important.

The report which was funded by the

Manpower Services Commission, Northern Ireland Department of Economic Development and the Scottish and Northern Ireland Education Departments contains selected examples of innovations.

These include the certificate in knitting techniques developed by the Shetland Islands Council education department to revive a traditional skill where a formerly important industry, construction, has gone into decline.

Another innovation has been the Cadbury Schweppes scheme to provide executive employees with a training in the attitude changes which accompany the introduction of computer-based offices.

Innovation in Continuing Education and Training in the United Kingdom by Karen Evans and Ruth Barker, £4, available from the Department of Educational Studies, University of Surrey, Guildford.

Universities to polish image

from E. Patrick McQuaid
CAMBRIDGE, MASS

In response to a spate of criticisms of America's state schools, the presidents of the leading research universities and executives with influential foundations and professional associations have promised to forge stronger ties with the schools.

The scholars, issuing a statement after an unusual three-day convocation at the Pajaro Dunes resort in northern California, also urged government at all levels to assert a responsibility. "Federal support, as well as assistance from state and local government, will be essential for real improvement," they said.

Attending the assembly were the presidents of Harvard, Stanford, Chicago, Wisconsin, Michigan and Columbia universities, the heads of education colleges at Harvard, Columbia, Stanford and the University of California at Berkeley, as well as the presidents of the Carnegie Foundation for the Advancement of Teaching, the New York Times Company Foundation and the Association of American Universities.

Among the initiatives the group said its institutions would undertake were bolstering direct ties with the schools; improving teacher education; enrichment programmes for students and

teachers; stressing on-campus research into teaching and learning; and "serving, where needed, as sources of advice in the shaping of public policies affecting education."

"Help from the universities must derive from their institutional strengths and from their diversity," the group's statement said. "The way in which each university can help will depend upon its character and circumstances."

It would be impossible to write a prescription for the institutions' commitment to the schools, but each university should choose from activities such as the following:

1. Strengthening existing affiliations with elementary and secondary schools, or initiating new ones;
2. Making improvements in educational practice through collaboration of university teaching staffs with the schools;
3. Improving teacher education programmes, including opportunities for helping classroom teachers;
4. Providing opportunities for the continued professional development of superintendents, principals and other school leaders;
5. Sponsoring special programmes on campus for enriching the experience of students and of school personnel;
6. Emphasizing research program-

mes that are aimed at deepening understanding of education and at the improvement of teaching and learning.

7. Encouraging institutional and teaching staff participation in collaborative curriculum development projects;

8. Encouraging students to consider devoting part of their lives to teaching;

9. Emphasizing the importance of teaching in the schools by recognizing especially successful teachers;

10. Serving, where needed, as sources of advice in the shaping of public policies affecting education.

The statement further noted that university contributions needed to be consistent. "Episodic interventions, like volatile government support, will merely raise expectations and then leave them unfulfilled."

No apple for teaching

The latest report on American schooling says teaching salaries lag far behind most other occupations, teacher morale is at a low point and the quality of new candidates attracted into the teaching profession is steadily declining.

The report is from the Carnegie Foundation for the Advancement of Teaching with a foreword by its president, Mr Ernest Boyer. The study on teaching was carried out by Ms Emily Feltrizer, who noted that salary alone could not account for the shocking increase in the number of dissatisfied teachers.

From a 1981 poll, 55 per cent of the teachers surveyed said they would not go into the profession again if they were starting afresh, compared to 11 per cent who gave that response 20 years ago.

"All the data about who currently is going into the teaching profession are grim," says the report. Standardised tests for teacher candidates are pegged at scoring 32 points below the national average on verbal abilities and 48 points below in mathematics.

"Whatever is wrong with American public schools cannot be fixed without the help of these teachers already in the nation's classrooms," Mr Boyer wrote. "Most of them will be there for years to come."

Australia boosts university budget

from Geoff Maslen

MELBOURNE Australian undergraduate students, postgraduates and secondary school pupils will receive a boost in their government allowances next year, according to budget papers just released by Mr Paul Keating, the Commonwealth treasurer.

Handing down a federal Labor government's first budget in eight years, Mr Keating announced that Commonwealth spending on education in the next 12 months would rise by 11 per cent to \$4,210m (£3,470m). Out of this, universities will receive \$1,187m (€988m) - an increase of almost 9 per cent on last year's figures. Colleges of advanced education will receive a \$600m (£335m) increase - an 8.7 per cent rise - in their grants, bringing their spending to \$917 (£539m). Technical and further education will receive the biggest increase - 16.7 per cent - and will get \$300m (£176m).

In the area of science and technology, the government is significantly changing the direction of research to boost high technology industry. The CSIRO, which is responsible for about half the research performed in Australia, will receive nearly \$317m (£186m) next year, a 10.6 per cent increase in operating funds over last year.

The government has continued the trend of telling the CSIRO where it may spend its money by directing it to spend \$22m (£13.5m) on new "sunrise industry" research. More than \$7.8m (£4.5m) will be spent on biotechnology such as genetic engineering of crops, \$6.3m (£3.7m) on advanced materials such as ceramics and \$4.6m (£2.7m) on information technologies.

The budget statements suggest that there will be cuts of up to 10 per cent in CSIRO's research in biological resources, energy and earth resources. But the budget allows for the continuing construction of the Australia telescope and an oceanographic research vessel.

In a big boost to high technology industry, the government has made a 15 per cent increase in funds allocated to the industrial research and development incentives scheme. More than \$71.6m (£42m) will be provided on a dollar-for-dollar basis to industry. The scheme also includes \$10m (£5.8m) for public interest funding such as research on a bionic ear for deaf people and a proposed stratospheric space telescope.

In what has been described as a "mild-mannered budget", the Hawke government has provided for a modest



Mr Keating: announced spending plans

increase in student allowances. This is certainly less than expected and extra students the government hopes will enrol in higher education next year.

Under the increases, full-time students eligible for the tertiary education allowance will receive a 5 per cent rise. The maximum entitlement for students living at home moves from \$2,010 (£1,182) a year in 1983, to \$2,110 (£1,241) in 1984.

For independent students and those living away from home, the allowance rises from \$3,100 (£1,823) to \$3,255 (£1,915) annually. However, the higher student allowance are accompanied by a 6 per cent lift in the amount a family can earn before becoming ineligible for the full tertiary education or secondary allowance.

Postgraduates will receive a 7 per cent increase, although the number of students will not be increased. The \$10m (£5.8m) increase to universities and colleges to enable them to enrol more students and employ more staff, who will probably be young postgraduate academics.

Increases of up to 20 per cent have been made in the secondary student allowance scheme. The government intends to encourage more families to ensure their children complete their secondary education.

Elsewhere in the budget, the government has committed more money to improving training opportunities for unemployed young people and especially for disadvantaged groups such as aborigines and migrants. Altogether, the government will spend \$395.8m (£233m) on unemployment and training schemes for an estimated 300,000 people.

Grounds for dismissal moderated

from Mark Gerson

TORONTO

British Columbia's Social Credit government has softened controversial legislation that would have left public employees open to dismissal without cause or due process.

Amendments to the Public Sector Restraint Act include an appeal mechanism, and allow colleges, universities and other public employers to dismiss staff only in certain situations. These are lack of work or funds; changes in organizational structure; termination of a programme, service or activity; or reduction in the level of services offered.

Some 1,500 public employees have already been sacked and the government has promised more as it attempts to trim its direct and indirect payroll by 25 per cent.

The amendments have not cleared the confusion surrounding the future of academic tenure in the province. According to early interpretations of the July budget, faculty tenure had been abolished along with job security throughout the public service. Since then, conflicting statements from the government have left the university

community in British Columbia unsure whether tenure will continue to exist and, if so, in what form.

Reactions to the amendment have been mixed. Some faculty and staff associations are grateful that the phrase "without cause" has been deleted from the legislation. Others consider the grounds for dismissal too broad and too vaguely worded to offer them any real protection. None have considered ending their membership in Operation Solidarity, a coalition of labour, minorities and human rights activists opposed to the restraint measures.

According to Howard K. Petch, president of the University of Victoria, existing university policies and agreements should provide faculty and staff with "extremely strong protection" against the arbitrary or unjust termination of employment. He also cited the Provincial Universities Act, which places the power to hire and fire faculty in the hands of the president. Neither university boards nor the government can step in, he insisted.

The province's two other university presidents have echoed Petch's assurances, that some members of the university community are reluctant to put their faith in the uncertain pre-

dence of the Universities Act. They note that the law governing the province's three universities mentions of non-academic staff, which is currently under review by provincial government. It would be amended in order to consolidate government control over universities, despite, or perhaps because of, the stated guarantees of university autonomy "while I'm minister" by various recent Vancouver rally organizers.

An August poll found that 57.6 per cent of those surveyed opposed "all new legislation" introduced since the Social Credit party returned to power in May. An advertising campaign designed to explain the extent of the province's new legislation is being launched by the government. The 26 bills that accompanied the budget and the budget itself are still tied up in the legislature, while the opposition New Democratic Party has pledged to filibuster every measure.

Swedish dropouts replaced

by Donald Fields

Young Swedes who passed the latest student matriculation examination but whose marks were too low for university entrance will after all be admitted into the country's universities this autumn.

The 3,200 students will replace an equivalent number among the original new entry of 21,000 who failed to actually embark on a degree course. The identity of the "first reserve" entitled to the places that fell free was determined by lowering the qualification mark for each faculty at the various universities.

The highest hurdle for university entrance is still applied to would-be students of journalism, medical science and specialized branches of pedagogy, and to competitors for places at the business-orientated Stockholm School of Economics.

The apparent wastage entailed when talented students decide against taking up places in Swedish universities is officially regarded as unexceptional in Europe. However, when combined with a high dropout rate during courses and evidence that a Swedish degree falls below par in many other countries this annual custom does arouse concern.

Student loan defaulters face compulsory loss of pay

from E. Patrick McQuaid

CAMBRIDGE

The Federal Education Ministry has announced plans to dock the pay cheques of some 41,000 government employees, most of them at the Pentagon, who have defaulted on their student loans to the tune of \$65m (£43m).

Elsewhere, the State of New York has recovered \$4.7m (£3m) by tapping the tax refunds of local loan defaulters. In Washington, agency officials with the Department of Education forwarded thick manila envelopes to various federal departments. These contained the names of their employees who were believed not to have paid back their government-guaranteed loans.

Unless these employees begin immediate voluntary repayment, up to 15 per cent of their pay or pensions may be withheld beginning later this year, according to a high ranking official.

The Pentagon received the largest envelope. According to education department officials, some 27,083 employees - 14,549 of them active, retired, or reserve military service, and the remainder in civilian employment - are considered to be in default.

The postal service came in a distant

second. Some dozen other federal agencies were notified that each had about a hundred suspected loan defaulters. No envelopes were delivered to the White House, said education representatives.

The names were obtained by making the records of 103m federal employees against a list of student loan defaulters.

Correspondence was sent to individuals between December 1982 and the following January. Some 1,500 federal employees responded, repaying roughly \$3.4m (£2m).

In New York, the tax office says it has identified 22,572 residents who owe a tax refund but also owe the state Department of Social Services a total of \$4.3m (£2.8m) for local funds used to support dependent children and some 1,674 persons who owe the Higher Education Service Corporation \$423,615 (£282,410).

In both cases the refunds were seized and transferred to the appropriate state agencies.

The city of New York has signed an agreement to swap information with the state of New York in an effort to expand tax enforcement programmes. Using a computer system, other municipalities are expected to participate as well.

The still small voice of protest

Vera Rich reports on reactions by Polish students and lecturers to their government's emergency powers

WORLDWIDE

The Polish government's new emergency powers, which will (it is promised) be abrogated at the end of 1983, should not seriously threaten academic freedom in Poland - at least in the short term. The provisions of the 1982 Education Act, which includes guarantees of tenure, the temporary closure of higher education courses, it is feared, could well be used to dispose of "unreliable" lecturers, even before the major review of higher education which, it was announced recently, will take place during the next five years.

If the first-year courses were, indeed, closed for political reasons, the authorities had good reason for concentrating on the humanities. It was from them, in the late 1970's, that the majority of students of the underground flying university came and it was precisely in the arts and social sciences that party-imposed restrictions were most felt.

During the 16 months of the Solidarity era, the Society of Academic Courses (TKK), a group of academics who had openly backed and/or helped the flying university, achieved a great deal in integrating previously banned or ignored topics into the university syllabus. But these changes did not survive martial law when, in a number of cases, the lecturers were interned or went into hiding. Early in 1982, however, a new network of underground self-education courses sprang up, under the general guidance of a social committee for learning.

More than 100 such courses are now reported to be in operation, organized on a less formal basis than the old flying university, with greater emphasis given to private reading and discussion groups rather than formal lectures. A number of science lecturers have, however, suffered official reprisals for their participation in Solidarity activities.

These changes are associated, in the opinion of most lecturers and students, with Professor Janusz Fiszek of Poznan, a close friend of the Minister of Science, Higher Education and Technology. Ironically, Dr Fiszek holds the OBE - awarded to him on the recommendation of the British Council - for

A recent statement from the rector of Warsaw University, Dr Kazimierz Dobrowolski noted that during the martial law period, 53 people were interned, 58 arrested, and 117 detained. No employee had lost his job, and no student had been expelled (this last in spite of a government order on August 30 last year making expulsion mandatory for students taking part in demonstrations).

Although most of the democratically elected rectors of the Solidarity era have now been replaced by government appointees, some high university officials have continued to take part in Solidarity demonstrations.

For the most part, however, the response of the academics has concentrated on the defence of colleges and students. An underground bulletin from Warsaw University, for example, reports a confrontation between the (elected) University Senate and the (government-appointed) rector, over the latter's decision to override a decision by the dean of history, Professor Juliusz Lukasiewicz, permitting a student to transfer from the Olsztyn Pedagogic College to Warsaw University.

Although occasional acts of protest were reported from the universities during the latter part of the last academic year, the academic staff appear to have resolved, for the most part, on the slow defence of academic liberty via the existing consultative machinery embodied in the 1982 Act. But the current emergency powers give the government considerable latitude in over-riding the decisions of academic councils and senates in suspending them should they seem too bold. The students have concentrated



Polish authorities are aware that students will rally to a new cause if provoked.

on their studies - legitimate and the extramural self-education courses.

But how long this situation will continue is open to question. New students were profoundly affected by the death of Grzegorz Przemyski, who died after a police beating during his school leaving examination last May. His death resulted in a national boycott of the traditional matriculation balls, even though nervous headteachers warned pupils that non-attendance could damage their future careers. An official inquiry into Przemyski's death was abandoned, and circumstantial details of the affair continue to circulate via the underground press.

The official explanation, that Grzegorz was drunk at the time, echoes the

government version of the incident involving Stanislaw Pyjas, a Krakow student found dead in May 1977 at the bottom of a flight of stairs, shortly after police interrogation. Pyjas, in fact, was known as a non-drinker and his death led to a boycott of the end of term Krakow carnival, the Juvencula, and an upsurge of political concern among Polish students, which greatly contributed to the later involvement of the academic community in Solidarity and led to the foundation of the Independent Students' Association (NZS).

The anger among young people over Przemyski's death, which still persists, will have alerted the authorities to the possibility that a new political martyr has been created.

Anne Scullion discusses the effects on Sudan's single party dictatorship of a wave of violent protest by a new rejectionist generation

Misunderstanding the writing on the wall

Students at the University of Khartoum have long regarded themselves as the revolutionary vanguard of Sudan, and with some historical justification, as they did spearhead the 1969 revolution which brought President Nimeiri to power.

The line which today's students are taking is somewhat different to that of 1969. Many students believe in the strict Islamic way of life. In fact the controlling group in the Khartoum University Students' Union is the Islamic Movement, a front for a highly motivated and militant group known as the Muslim Brotherhood. A right-wing movement which has a lot in common with the policies of Ayatollah Khomeini.

But there is another student group, the Neutral Students' Conference, which gained 36 per cent of the vote in the union elections in November 1982. (The Islamic Movement gained 48 per cent of the vote.) The Muslim Brotherhood and the university authorities see the Neutral Students' Conference as a threat to the Islamic Movement and have used it as an example of how the university students have supposedly declared their overwhelming affinity for Islam and their rejection of the West.

Although the Neutral Students' Conference is generally Islamic, it is also a front for the Independent-Socialists' Union, an underground political organization spreading across Sudan and which, within the university bands together the Republican Brothers, the Independent Students and the Ba'athist and Student Struggle. The general aims of these groups together are to have a socialist government, academic and political freedom, and equality for women, all within an Islamic framework.

In January 1982, there were street riots and demonstrations in many regions of Sudan, mainly triggered by the violent activities of the students in Khartoum. This violence was ostensibly

responsible for change. "If this tendency continues, and the burning and breaking goes on, within ten years we will have a rejectionist generation like that in Europe today."

Professor Beil and his colleagues are denying that they already have a rejectionist generation. They wish to believe that the student demonstrations are only about sugar prices and academic problems. They refuse to believe that university students in Sudan, given a higher level of education, have an additional level of awareness. The students are rejecting the restrictions on their academic lives, their personal lives, their social and educational awareness and their political freedom.

The students are very aware that the rejection of government policies must come through them as the government declared strikes illegal after the rail workers' strike in 1981. In addition, all trade unions are now affiliated to the Sudan Socialist Union (SSU) which is the government's political party. The students now see themselves as the only section of society with any amount of freedom to demonstrate their political objections. They are not just concerned with their standard of living nor the political and academic restrictions on them as students, they are more concerned with their lives after they graduate.

Sudan is ruled by President Nimeiri in a single party dictatorship which includes the Muslim Brotherhood. Because of Sudan's turbulent history as well as the fact that President Nimeiri himself came to power as a result of violent revolution, students graduating who opt to work for the government, must sign a contract which has a clause stating that they will not oppose the government. The government is the largest employer of all graduates.

There have been criticisms within Sudan that graduates working in the civil service do nothing to change or improve the system. Given the fact that they are government employees on a government salary, having signed a pro-government statement, it's not surprising that few dare to challenge. With these restrictions and the restrictions on the trade unions, the only section of society aware enough, vocal

enough, and determined enough to violently challenge the government at present are the politically active students within the universities.

This does not mean that there are no other challenges and no other types of social change. The violent demonstrations are made on the whole by the male students. But the women in the university are not sitting back and accepting the situation. Many know that when they finish their studies that employment opportunities as a single woman are almost non-existent, as a woman in Sudan cannot achieve a respectable position in society until she is married and has children.

Many of the women in the university choose husbands who will be acceptable to their families, who are from the same tribe, who have the financial requirements with which to marry (the average marriage costs approximately 2000 Sudanese pounds) but also who have the same type of desire for social change. Many of these women marry

with the intention of raising a family which will be aware of the need for change, aware of the fact that a strict Islamic society like that in Sudan is not conducive to women's education and that women are blatantly discriminated against.

While the men challenge publicly, the women challenge privately. The University of Khartoum has 14,000 students, a large majority of whom are bitterly discontented. Many are no longer adhering to the strict social and moral codes, they are no longer accepting blindly to demands of the Muslim Brotherhood, and many of them are now openly declaring that change must come.

The women believe that change will come through a generation of changing attitudes, the men believe that change will come violently and quickly. However it happens, there should be no doubt that as in 1969 the change will come through the students.

Foreign studies turned outside in

Fay Haussman explains why Brazil is overhauling its postgraduate and foreign scholarship system

Brazilian graduates who come to Britain with a government grant to get their masters' degree or study for a medical or other professional qualification each cost their country US\$20,000 (£13,000) a year. For post-doctoral studies the annual cost is US\$25,000 (£16,500). In France and in the United States the costs are slightly lower but still about four times higher than scholarships for the same studies in Brazil.

With Brazil's worsening economic crisis, questions about the value of postgraduate studies abroad have become more acute. How are candidates selected for these grants? Aside from intellectual qualifications, have they any awareness of their social responsibility? And what return does Brazilian society get for its investment?

With precisely these questions in mind, a group of government experts from three of Brazil's chief scientific and educational agencies - CNPq, CAPES, and FINEP - met in Brasilia in July to discuss a study prepared by CNPq in Brazil's postgraduate education and scholarship system.

Brazil's postgraduate education system is less than 20 years old. The academic rector of Rio de Janeiro's Pontifical Catholic University, PUC, now that a mechanical engineer went to study a master's degree there in 1963.

In all likelihood it was Brazil's first. It took until 1969 to establish norms for which by then were growing by leaps and bounds. Between 1970 and 1980, enrolments in postgraduate education leapt from 3,000 to 33,635.

At least half of that decade still belonged to what was called "the Brazilian miracle", with its surging demand for human resources and particularly for top-level professionals. In 1969, Brazil's total number of accredited lawyers, agronomists, architects, engineers, veterinarians, dentists, economists and so on, all of them graduates of professional education, was 230,074. More and more rapidly.

Brazilians are excellent and outspoken self-critics. Even before the promulgation in 1975 of Brazil's first formal national postgraduate education plan, with its ambitious goal of graduating 16,800 new master's students and 1,400 new doctors by 1979, the postgraduate education was now permitted to "mature" as had happened with undergraduate education. It was now a drop of academic quality in the same drop of academic quality. It also feared that once 1979's system

was hastily being built on foreign models, instead of trying to develop it slowly according to national needs.

The rapid growth of Brazil's admittedly inadequate undergraduate education had been triggered at the end of the 1960s chiefly in an attempt to defuse explosive political pressures which demanded new avenues for social mobility. The growth of postgraduate education, however, was initially meant to produce mainly quality academic cadres to fill the country's "lacunae" of university professors and researchers.

Brazilian professionals with new postgraduate degrees could as a rule look forward to perhaps stimulating practice they got snapped up by the labour market and given salaries. For professors who returned from Oxford, Paris or Stanford, the salary was the highest in the world. Partly due to its long subversive role as a Portuguese colony, Brazil has always adopted foreign models. For its first higher education institution in Portugal, and to Paris, Brazilian

schools, and particularly secondary education, came to be modelled on the French type. Because of the shortage of qualified academics, Brazil's first real university, the University of São Paulo, was from the start in 1934 staffed with young European, (chiefly French) academics.

Many of them later became scientists of world renown - Claude Lévi-Strauss, Roger Bastide, Pierre Monbeig, Ernest Breisau Francisco Piccolo, to name just a few. All of them researched and taught Brazilian topics ranging from race relations to agricultural problems.

By 1971, a new wave of French academics had come to Brazil this time to teach on the new postgraduate courses for which qualified Brazilian academics were in woefully short supply. They stayed a semester or two, or even longer. Professor Jacques Merle, who had left France in 1966 to give Rio's PUC applied mathematics, had been in Brazil five years later that he had simply "decided to stay on".

But however successful French professors may have been in Brazil, some of the Brazilian students sent to France returned with abysmal results. Their failures triggered the first sharp criticism of Brazil's foreign grants system, made public in the middle of last year.

In a study by Cláudio de Menezes Castro, one of Brazil's prominent economists, researchers and planners. He said that about a third of the doctoral du trousteur cycle as well as other French degrees had little relevance to the career of a Brazilian professor. Chiefly, he objected to the fact that Brazilian students in France were suddenly projected into foreign programmes affording great freedom but also demanding a level of self-discipline, maturity and preparation that was totally unknown.

Last July's CNPq study pointed out that with Brazil's enormous inflation rate and the rise in tuition fees in Britain and the United States, foreign study grants were becoming a nearly unaffordable luxury for Brazil. The study also stressed that no one doubted the value of postgraduate training abroad, particularly in Britain and in the US whose academic criteria were by now well known in Brazil and prompted the proper choice of suitable courses. If funds could be found for them. However, it was urgent first to analyze carefully the present postgraduate system in Brazil and its potential, to establish the areas and levels where studies abroad would remain indispensable and to select candidates for grants abroad according to the most rigorous criteria.

THE TIMES SUPPLEMENTS REPRINT SERVICE

Robbins to Leverhulme

The Leverhulme programme of study into the future of higher education was organised by the Society for Research into Higher Education with a grant from the Leverhulme Trust and further grants were made by the Gulbenkian Foundation and the Department of Education and Science. The programme consisted of eight seminars the first in April 1981 and the last in September 1982.

An edited four-page version of the final report is now available in reprint form (first published in The Times Higher Education Supplement on 27th May, 1983) price 25p.

Inquiries should be addressed to Frances Goddard, The Times Supplements, Priory House, St John's Lane, London EC1M 4BX. Cheques/postal orders should be made payable to Times Newspapers Limited (no cash please).



Worlds apart... Roedean School in its opulent cliff-top setting and, less than half a mile away, Stanley Deason school.

Brighton on the rocks

Paul Flather looks at an exercise in practical economics designed to break out of traditional academic constraints

"People like myself who have not really had a lot of education in the sense of things like economics, have rather held these things in awe... We're beginning to grasp more and more, that intellectual matters do represent something, not just black words on a white page."

These words by a Brighton busman appear in a new book which sets out to document exactly what has been happening to the town's economy during the past few years. The work was carried out by a group varying from 15 to 20 people - including a handful of academics - who also wanted to break down some of the "intellectual abstractions" they see as preventing large numbers of people from understanding what we traditionally regard as complex economic matters.

The book, *Brighton on The Rocks*, was conceived in July 1980 during a wave of protests against cutbacks in East Sussex. In the space of 10 days two large meetings were held outside the local council headquarters in Lewes, focusing particularly on cuts in the education budget. Protesters even forced their way into the council chamber. It was decided to produce a detailed study of council spending policies and draw up an alternative modelled on the plan to produce "useful products" by workers at Lucas Aerospace.

The book comprises that detailed study. It sets out to examine if people really have been "having a party on the rates" as commonly claimed by the council. It asks if council spending really has increased faster than national growth, whether people have been consuming more than they earn, and whether the council has been employing too many people.

The result is an unashamedly political statement, a hard hitting rebuttal to the claims for monetarism in the community of Brighton. Using interviews, words and pictures, very much influenced by John Berger's style of representation, it concludes that monetarism is not really about money or too

much government, but a way of attacking the welfare state. Pictures for example contrast a run-down Stanley Deason school on the Whitehawk estate, with the opulence of Roedean School. So far more than 1,000 of the 3,000 copies printed have been sold.

The QueenSpark group - named after the Queen's Park area of East Brighton - spent more than a year writing up the study. Robin Murray, one of two economists involved and a former reader at the Institute of Development Economics at Sussex University, said the problem was to make economics intelligible to the ordinary reader. "If you mention the word monetarism to a man in the street it does not mean a lot."

The group found that the best way to tackle the problem was to sit down and talk to people about how their lives had been affected. Thus talking to dustmen they found real examples of how budget cuts had led to greatly intensified work schedules. With local bus-dealing with the problem of rostering, at the time also a key issue in a dispute on British Rail.

"These talks and interviews allowed people who were not economic experts to become directly involved in the central economic debates of the day," Murray said. The interviews also helped the academics to grasp what the economic debates really involved. Murray, who now heads the Greater London Council's policy planning unit, believes there are the same problems in the seminar room.

Harry Johnson at the London School of Economics, just he said, as the monetarists were beginning to emerge. He has always felt economics could be more relevant to the non-academic. In the early 1970s he became

involved in the Conference of Socialist Economists, struck particularly by the way members tried to deal with "real problems" in the production process. The other place he found such relevant work was the London Business School, where he taught for four years, before moving to the IDS at Sussex, another "practically orientated centre".

"I think one of the great enemies of original thought is the universities. Many of our major breakthroughs are made outside universities. They have such a tendency to reproduce the same answers to old problems," he says bluntly.

The group also contained Stephen Yeo, a lecturer in history at Sussex University, Penny Dunne, a lawyer, IDS, and Don Mather, a lecturer at Brighton Polytechnic and the other Brun, a Belgian, who also worked at the IDS, took most of the pictures.

Mather said that one of the central aims was to try to produce a work that would get over the abstraction of ideas. "He himself joined academic life a mature student after training as an apprentice in basic electronics. He has

no doubt academics have a strong duty to serve the local community, in part by analysing what is happening locally. A chart at the front of the book shows the polytechnic as the region's 14th largest employer, although it is based on 1976 data. "The polytechnic obviously aims to play an increasing role within the local community," Mather said. "But quite often academic institutions are very segregated from the people they are supposed to serve."

Mather hopes the book has succeeded, he is honest enough to admit that despite all the effort it may still prove too much for some people. Bob Golby, who works for the South Down bus company, has no doubt the book has worked "helping people who believe economics is just out of their ken". He believes that too often fairly simple ideas are made too complex and shrouded in intellectual jargon.

"Perhaps it is to justify someone being an economist," he suggests. "Some of the book is still complicated. But it's a pretty good start. People can relate the problems to their own lives."

One of the techniques used by the group was to keep the academic members under "check". Adelaide Fortin, a teacher, and another member of the group recalls how they would sit late into the night discussing ways of presenting the material.

Another approach used to great effect, developed from the oral tradition of the Workers and Writers Federation and the History Workshop, was to present straight interviews with teachers, busmen, homeless people, family members, and dustmen. For example an adult education student, part-time in a hospital, describes how she took her course and adds she would be happy to pay increased rates to make the adult classes free.

Murray also strongly believes need technical engineering skill, to monitor apparatus. And I think the skills of a really good historian are very important: if something is not reproducible by will or predictable by theory, you're in the realm of natural history. You have to know the difference between primary and secondary sources, to evaluate testimony, and constantly produce historical tables of sequence."

Mind, matter and money

Olga Wojtas reports on the first tentative moves to establish a chair of parapsychology

It is now two months since the announcement of the £400,000 bequest from the writer Arthur Koestler and his wife Cynthia to found Britain's first chair of parapsychology.

There are at least five serious contenders at present: Cambridge, Edinburgh and Lancaster Universities, the University of Wales and City University, London. However, they are all proceeding extremely cautiously since parapsychology is undoubtedly a controversial field which attracts not only criticism but even ridicule.

It deals with two kinds of phenomena, physical and mental: psychokinesis, influencing physical events by purely mental means, and extra-sensory perception, gaining information other than through the known sensory channels. Parapsychology itself seems to be as old as history: cave drawings of animals are believed to be an attempt to gain power over them through magic.

But parapsychology as a subject has developed only within the past 120 years. The Society for Psychical Research, currently the only recognized discipline, scholarly authority on the subject in Britain, celebrated its centenary last year.

It guards standards of investigation rather than promoting any kind of belief or disbelief. Mary Everest Boddy, one of its founders, wrote nearly 100 years ago that its leaders "reject the course in a spirit of calm and dispassionate inquiry, equally unmoved by the allurements of antagonism, and by the over-enthusiasm and too ready belief which will seize upon the first sensational claim."

But although it is a learned society, it is outside the academic orbit. Indeed,

much of the hostility towards parapsychology comes from academics, who maintain it is not a scientific discipline.

It is certainly true that as far as the scientific community is concerned, parapsychological phenomena have never been satisfactorily demonstrated to be beyond doubt, principally because the phenomena cannot be produced to order. But that does not justify parapsychology being labelled unscientific. It is an anomalous subject, defined negatively as occurrences which cannot be explained by normal means.

According to Sir Karl Popper's theory of science, which is arousing increasing interest, a theory holds until it is disproved, and it can be seen as seeking to develop theories covering parapsychological phenomena. But Dr Anita Gregory, a lecturer at North London Polytechnic, and honorary secretary of the Society for Parapsychological Research, points out that parapsychology falls into the academic poverty trap.

"People demand the firmest, most conclusive results, and make no allowance for the fact that the subject is so new. Since it is not a recognized subject in British universities, it has no access to any of the facilities which a research subject, even a new one, has. I don't see how any subject can be expected to prosper and advance as long as there is no acknowledgment that it exists. Without the Koestler bequest, it is difficult to see how the subject could

begin to flourish in the present climate with its fierce emphasis on direct relevance. Koestler's intention, says Dr Gregory, who knew him well, was to give the investigation of phenomena the same standing enjoyed by other disciplines."

Dr John Beloff of Edinburgh University's psychology department, who is an executor of the bequest, adds that Koestler may also have been taking an implicit delight in annoying the academic establishment, which gave him little recognition and tended to look on him as an amateur in science. A parapsychology chair is not unprecedented: there is one at the University of Utrecht in the Netherlands, and it is studied at several American institutions, including Princeton.

A chair in Britain would, academic-minded people hope, bring some respectability to the subject, but the subject does suffer from the ubiquitous presence of amateurish do-gooders. Some amateurs do quite excellent work, but others range from the downright fraudulent to the downright idiotic when a tape recorder does not work that the spirits have interfered with it, rather than the equipment.

Parapsychology is not seen as an academic subject, but as something to entertain the public, and then when a Geller is discredited, the subject itself is discredited. The subject itself is not a person's view. But to research parapsychology is not for a

moment imply that the researcher is a "believer". "I don't think you can be a good psychological researcher without being sceptical," says Anita Gregory. If any academics can be said to be parapsychologists, they are likely to be physicists, and some people believe that eventual understanding of psychokinesis may come from extending theories in quantum physics about the nature of matter. But physicists tend to approach apparent phenomena with a certain naivete, because of their lack of background in psychology.

Dr Gregory believes it very important for parapsychologists to have some knowledge of "psychopathology, the mind. "When you go into a group supposed to be happening, it's advisable to know about group interaction phenomena, and the fight for ascendancy. If you're in completely innocent, you're liable, either to exert pressure, or to be let down by it, or to fail to see it being exerted."

Dr Gregory's own research in parapsychology has revealed instances of what she describes as "strictly speaking, negative evidence, contamination, bullied by true believers" into admitting the reality of things they believe to be untrue.

She feels parapsychology should develop as an interdisciplinary subject, with links in particular with psychology. "You need someone who's competent at dealing with people. You also

academics have a responsibility to the community they live in. He thinks that once academics metaphorically roll up their sleeves and become involved, they inevitably discover what the problems not addressed by traditional economics in academic institutions. An example he cites problems found in production, and in the way services are provided.

A whole set of different problems emerge when one looks at labour relations in specific firms, he said. An example trying to distinguish between the financial value of a machine operating 60 times as fast as human labour and its impact on the local economy. Thus rostering, a marginal problem in applied economics, becomes a central problem in real economics, involving, for example assessment of how individuals actually cope.

The question of whether services ought to be brought from private contractors or provided by the state raises similar "disjunctions", he said. "At one level it is a question of the decides what repairs are done or the colour of a door is. But at another level, it could become a question of what kind of education is to be provided. More is not just a medium of exchange of means of payment as every economist is taught. It is also a way of controlling lives."

Whatever the political merits of the case of the QueenSpark group, the project serves as a useful example of the mutual benefits that can arise when academics turn their analytical skills to local issues and community problems. It helps further to dispel the myth of the ivory tower. "I use it to think of history as a collection of dates and royalty suddenly I realized that history, by being something that's gone and finished with, has an immediate resonance with what you are doing now."

Brighton on The Rocks: monetarism and the local state by the QueenSpark Book Group, price £3.95 plus 50p post from QueenSpark, 13 West Drive, Brighton.

MILESTONES

Boris Ford recalls how Shakespeare's *Antony and Cleopatra* has shaped his life

It must have been in the same term that I failed School Certificate English literature that some of us were taken to Norwich to see *Antony and Cleopatra* at the Maddermarket Theatre. I had failed to read the play in advance; and when we were told that the actors would be amateurs, I remember feeling disgruntled long before we arrived.

Some hours later, travelling back in the coach, I felt at once chastened and elated, transfixed by the image of the dark-haired, purple-robed Cleopatra as Antony was lifted up into the monument hung with dark glowing curtains. Half reclining against a kind of throne behind her, yet with her arms reaching towards the dying Antony:

The soldier's pole is fall'n: young boys and girls are level now with men: the odds is gone, and there is nothing left remarkable beneath the visiting moon.

These lines, spoken that afternoon with great quietude from but of the depths of despair, haunted me in the inconspicuous coach, and they have haunted me ever since. In the overwhelming sense of the being no thing left remarkable, it was as if everything had become remarkable beneath the moon of that return journey.

When I awoke to the plainer realities of classroom life, I knew without any doubt that I would specialize not in maths or music, but in English literature. There was Taylor, the music teacher who produced the school's noted performance of *Shakespeare*; there was Denys Thompson who later became a co-ordinator of *Scrutiny* and there was McCannan. The last of these was employed to teach modern languages, economics, and divinity. In the midst of any of these he was liable to stop abruptly, and break forth into a shorter, or longer passage of verse or prose in seven or eight languages, which he called *Spells*. He transfixed us, and though very often we had only a hazy understanding of the prose meaning of the words, we took possession of them at once less definable level.

So I spent the next two years studying English in these complementary ways, and then went on to Cambridge to read English with F. R. Leavis. In my first term, indeed within a week or two of arriving, he set us a critical exercise: to compare *Antony and Cleopatra*, which we probably thought we knew very well with Dryden's *All For Love*, which I think none of us had read. We were to concentrate in particular on the parallel treatments of Cleopatra's arrival.

We did our tolerable best. And then Leavis, leaving Dryden far behind, offered a depth of analysis of Shakespeare's fabulous evocation that indeed beggared all description as an example of practical criticism, because it was so much more than textual analysis: it helped to re-enact the life of the verses, though we were far from a stage.

That was nearly 40 years ago, and none of the three or four noted performances of the play I have seen since has stuck in my memory so firmly as these amateur projects. Many years later, visiting a college of further education, one of the staff introduced himself and said he had taken a minor part in the first *Antony and Cleopatra* project. He still remembered every moment of that experience and indeed the experience had prompted him to go into teaching in order to find ways of helping others to discover Shakespeare as he had done. I remember telling him that my own naive visit to the Maddermarket was really the start of it all: not maths nor music, but English literature and eventually the *Pelican Guide to English Literature* designed for just such readers and students as him.

When the manuscript for the Shakespeare volume of the *Guide* came in, I was irrationally pleased to find that Leo Salinger concluded his splendid survey of "The Elizabethan Literary Renaissance" with a masterly analysis of Cleopatra's passion for the dead Antony. The consummate art of this great play seems to have been marked at every stage a long process of development in my own life.

Parapsychology is currently seen as unorthodox; but the history of medicine, and of science in general, is littered with reversed heresies and orthodoxies. It will be much less entertaining to the public as academic research than performances by mediums and metal benders, but academic acceptability can only come when it is realized that the world of the miracle-mongers and "true believers" is far removed from that of the research.

Tongue tied . . .

In about 20 years we shall all know clearly where Britain went wrong about now. One mistake will almost certainly be the withdrawal of minority languages from school curricula and higher education provision.

We all know the traumas of Russian departments in universities. But Russian is being offered, if only sparingly. We shall have a few people to interpret for us when they arrive.

But what are we to make of a trading nation like ours, cap in hand for 1981 had one candidate for Arabic at A level in the whole of England and Wales? One. Disbelievers need only turn to Table 3 of the Department of Education and Science consultative paper *Foreign Languages in the School Curriculum*.

The document is one of those exasperating papers that the DES puts out from time to time, summarizing the inaction up to now and lamely admitting its powerlessness to do anything: very conveniently, what is taught in British schools is what schools fancy teaching. At most, the local authority officials and its advisors can sway things a little one way or another. National policy simply does not exist, which means that in fact times it does not matter, since there is cake for all, but that in thin times growing thinner a policy to defend the small against the big becomes essential. The innovative usually starts acorn-size.

As an example, is the increasing preponderance of French in schools healthy? Do so many of us really need to struggle with the language of some 70 million native French speakers and ignore practically everybody else - the 120 million German speakers who straddle the Iron Curtain, the 300 million Spanish speakers who inhabit 19 sovereign states and occupy nearly a fifth of the world's land surface; 110 million Japanese, the world's cleverest and richest people in whose language we produce enough graduates to occupy the fingers of one hand, with several fingers to spare. This is not an enumeration since enumerations imply a pecking order and any list would have to be pretty long. It is the lack of spread that is the problem.

The UK, at present, is ideally placed to become a land of linguists. Paradoxically this arises from the acceptance of the fact that English is today's international language of affairs. Foreigners are all learning English *à l'américaine* instead of each other's languages. That leaves us with the luxury of being free to learn a breadth of tongues as never before.

Really it is otherwise: the latest Occasional Paper from the DES Assessment of Performance Unit *Foreign Language Provision*, highlights the declining provision of languages in schools. Only 6 per cent offer German as first foreign language and 1 per cent Spanish. Otherwise it is *le choix de Hobson*. More disturbing still is the minority of schools, 2 per cent and growing, that do not even offer French.

The home languages of "sizeable pockets of immigrant children are ignored. Indeed, they are treated as a problem. Children are made to undergo "remedial" classes in English, as part of the English as a Foreign Language industry. Nothing like giving a child the feeling that his home language is an anachronism to make him forget it. When he has got over it, he can learn French. Britain loses thereby a storehouse of potential speakers of Greek, Cantonese, Turkish, Gujarati etc. The methods are subtler, gentler than those once used to eradicate Gaelic and Welsh; the attitudes and the end-result remain the same.

Small signs of weakness in these island attitudes of ours occasionally appear. There is the Schools Council Mother Tongue Project, financed by the European Community, inquiring into ways of supporting the mother tongue of Greek and Bengali children at primary school level. It is significant that the grant is not British and it took the Inner London Education Authority to go and get it. Other local authorities do nothing, all 103 of them. Are there any lessons to be learned



for the universities and polytechnics? The situation has not changed since Mrs Shirley Williams was in the big chair at the DES and "worried about the situation in modern languages. More and more schools were offering only French, and many youngsters did not appreciate how great were the opportunities, especially in industry and commerce, from learning some of the less popular languages." She and her successors have done less than nothing to provide for anything other than French, or to legislate (and I mean that) for an end to school time-tables ensuring that boys who opt for sciences and maths must drop languages, and that girls who opt for languages/arts must drop sciences and maths. It is such a gender split that one wonders that the equal opportunities people have done nothing about it. Undergraduates reading French at university are 80 per cent female. Nothing convinces me that French is sex-linked.

Perhaps the main lesson for higher education is that we must resist the facile assumption that when the cuts come the easiest bit to cut off is the lesser languages. The universities, to their shame, moved that way; with the National Advisory Body report due soon the first reaction will almost automatically be, in monoglot academic boards, to lose Spanish, chop German, snip French. The *ab initio* course in rarer languages, developed in the polytechnics to offset the foreign

language illiteracy of the UK schools system, will be the first to go. We shall follow the USA down the monolingual road that belatedly the Americans are trying to reverse. Ernest Boyer, in these columns, wrote "... there is also alarming evidence that American students are poorly informed about the world and almost uniformly devoid of skills in foreign languages". Surprise, surprise, that the two go together.

One of the few bits of humour to come out of the Falklands mini-war, reported in the *Daily Telegraph* of July 12, 1982, rather underlines the value of "minority languages". A Captain Nigel Bedford had led a small party of men ashore to gather military intelligence when they heard voices.

"We couldn't understand what they were saying and assumed they must be Spanish-speaking". So he and his men lay still for an hour getting frostbitten until they discovered that the chatter came from penguins, not from Argentines.

Howlers like this lack a name in English or Spanish. I offer *un malvismo*, *un malvinismo*, a *malvinon*. If the NABOs do their worst, in 20 years time we shall watch the Nigel Bedfords of the day getting their heads blown off, because that time they got it the other way round.

The author lectures in Spanish and French at Hatfield Polytechnic.

FREE

Take out a year's subscription to The Times Higher Education Supplement and we will also send a free copy (worth £7.75) of the very latest hardback edition of the Concise Oxford Dictionary specially bound for The Times Supplements. It contains entries for over 40,000 headwords, with a total of some 75,000 vocabulary items including derivatives, compounds, and abbreviations. Simply complete the coupon below and send it together with your cheque or postal order for £22.50 to the address shown. This offer applies to new subscribers in the UK only.

The Times Higher Education Supplement

Please send a free THE Concise Oxford Dictionary and a year's subscription to The Times Higher Education Supplement. I enclose my cheque for £22.50 (Cheques made payable to Times Newspapers Ltd). Please send to:

NAME _____

ADDRESS _____

SIGNATURE _____ DATE _____

Please send this coupon with your cheque to FRANCES HOUSE, The Times Higher Education Supplement, Priory House, St John's Lane, London, EC4M 6BX.

An advance on the title game

Should academics have the right of permanent tenure to senior posts? Philip Thody argues this should be replaced with a rotating system

It may sound odd in the present climate, but we in Leeds University are promoting 12 people to senior lectureship this year. Enough people have taken early or ordinary retirement for us to do it without breaking any rules. It's all open and above board, especially in the way the promotions are decided.

Like a number of other good systems (the human body, the British constitution) it has evolved over a period of time. When I first took part in it, in 1967, it contained a number of decided oddities. In those days, the final recommendations were sent forward to the senate by the senate business committee. This contained the usual selection of ex-officio members - deans, chairmen or women of faculty boards, deputy chairmen or women of appointing committees - together with a number of members elected from the senate. Then as now, promotions were decided on a university rather than a faculty or departmental basis, but nobody had yet devised a means of overcoming the obvious disadvantage of this system.

This was that somebody like myself - I teach French - was expected to give an authoritative opinion on an electrical engineer or microbiologist whose field of research was, from my point of view, so arcane that I couldn't even understand what the words describing it meant. This opinion also had to be delivered in public, in the course of a round table discussion from which the names of the winners gradually emerged and were forwarded to the senate.

Approval was generally forthcoming, especially after the vice-chancellor had once allowed the steel to glint out from behind the wool. For when one professor vehemently complained that his candidate had not been recommended for promotion (in spite of the possession by this candidate of almost all the more admirable qualities of Brunel, Einstein, and A. J. P. Taylor) the vice-chancellor used a little bureaucratic centralism. He observed that any decision to refer one name back to the senate would inevitably involve a complete reconsideration of all the candidates. The whole list was approved.

While such tactics are still available in 1983, they are much less likely to be needed. For the recommendations now come forward to the senate from the academic staff committees. This consists mainly of elected members, is representative of the whole teaching staff of the university and is large enough to be split into three faculty groups; arts, economics, social studies and law; science and applied science; medicine.

One scientist and one humanities person sits and votes on all the groups to ensure comparability of standards. In addition, the dean of medicine sits and votes on the sciences group, while an additional scientist also sits on the medical group. You can either put yourself forward or persuade your head of department to do it for you. In either case, his or her written comments will be available to the committee, whose members will give you a mark under three main headings:

- (1) Academic and professional standing;
- (2) Undergraduate and postgraduate teaching for university qualifications (including course work, PhD);
- (3) Research studentship training and supervision.

(4) Departmental status and output; (5) Participation in university extra-departmental affairs. Thus (1) not only requires a list of your published work, it also enables you to put your head of department to rest, as external examiners in another university or at a polytechnic

whether you are asked to serve as consultant by business firms or to give lectures in other institutions; how successful you are in attracting outside money for your research; whether you are a member of any professional body; how close you have got in your applications for chairs or other appointments elsewhere; and generally what indications your professional colleagues have given to show that you are, as it were, *passable*.

The rules state very clearly that nobody may give a view on the possible promotion of a lecturer to the rank of senior lecturer unless they are at least of senior lecturer rank themselves. This means that members of the academic staff committee are all senior lecturers or above and this is obviously a good thing. Nobody has a personal axe to grind.

This rule nevertheless has the important disadvantage of excluding the opinion of those who are on the receiving end of the teaching. For it goes without saying that a university as English in all the ways as Leeds has not agreed to the systematic use of student questionnaires to find out what the victims of the teaching think. Such practices may be acceptable in Yale, Princeton or Magill, but not in Yorkshire - or, I suspect, in Lancashire, Warwickshire, Avon or Humberside either.

Of course, we do try to obtain some hard evidence. You or your head of department must say how many contact hours a week you have, how many of the candidates you have supervised have actually got their PhD, what innovations you have introduced into your teaching, whether you turn up on time, and how willingly undergraduates sign themselves in for the special options which you offer.

But the disadvantage of (2) and of (3a) in particular, is that the opinions expressed depend very much on hearsay; and on hearsay which at times has little foundation in fact. For I have been surprised, over the years, at how few of my professional colleagues actually seem able to put their hand on their heart and say that they have heard their *protégé* perform.

The kind of disadvantages which the system does contain became painfully apparent to me in an incident which happened a few years ago. A colleague was about to be recommended for promotion and had been diaphanous. But it so happened that I had once heard this colleague give a talk, at one of those residential inter-disciplinary conferences which are so useful a means of discovering whether the grass really is greener on the other side or not. And this talk had been so appallingly constructed and delivered that I simply had to ask whether any other member of the committee had ever heard this colleague lecture in spite of the fact that one member of his/her department was on the committee, together with two more from an associated area, nobody had.

The recommendation nevertheless went forward. For as the importance also given to (3) makes clear, promotion to senior lectureship is not based solely on the ability to lecture, any more than simply on one's publications. Universities are self-governing institutions.

Credit is therefore given in the promotions exercise to the work which lecturers have put in at the running both of their department and of the wider university community. Heads of departments are therefore asked whether their other candidates would be able to act as head of department themselves, and what work they do on a day-to-day basis to ensure that matters run smoothly. Candidates scoring a high mark in this section also tend to be people



who accept membership of general university committees, become sub-deans or faculty teaching officers, act as intra-faculty advisers of students, maintain contact with local schools, help to run the senior common room, are active in one of the chaplains, sit on governing bodies of halls of residence, run week-end or vacation courses for sixth-formers, play in a team, an orchestra or a dramatic society.

32 members of the academic staff committee receive a copy of the form which has been submitted for each candidate. Each member of each faculty group is then required to return to the registrar a specific mark for each candidate, whether or not they have seen him or her, and to give each section of the form the three sections of which the form is made up. Unless you are one of those sitting on all three groups to ensure comparability, you send in a numerical mark only for your own group.

There is an agreed marking scale whereby the highest mark that can be awarded for each section is A+ or eight in numerical terms. Each committee member naturally marks his or her forms in privacy and without consulting anyone, either inside or outside the university. The decision as to whether to give a particular candidate six under section (1), five under section (2) and six under section (3) is consequently one which I can take without having to worry about whether Badman, Dryadust or Graveyard will snigger at my naivety or be appalled by my parsimony.

I then send in my score to the registrar. All 13 other members of my faculty group, together with the stranger without the gates from science and applied science, are also doing the same thing in a comparatively discreet and discrete manner. We each give an individual score for each section, the registrar adds them all up, averages them out and presents up at the meeting of our group with a numerical document that even I can understand. It tells us who got what mark, under which sections as well as on aggregate.

The 12 promotions to be made in Leeds this year are, as I have said, to be distributed on a university basis. There is no faculty and certainly no departmental quota.

Nevertheless, there has grown up a convention whereby roughly equal numbers of promotions are made from within each faculty group. Although this does not always happen, the final meeting of the whole academic staff committee is generally an easy and congenial occasion. Each faculty group has already met before the meeting takes place, analysed the scores and discussed individual cases and decided on its proposed order of merit.

This order is based largely on the marks, but also on the marks obtained by each candidate and the

purpose of this final meeting of the whole committee is to ensure comparability of standards between faculty groups as well as to enable each group to explain and justify its recommendation. Justice is thus not only done, but is also - rather blatantly perhaps - seen to be done.

This seems to me to be the great advantage of the Leeds system. Everyone knows how it works and anyone can put themselves forward. There is, for example, no age barrier and no rule that only senior colleagues can be senior lecturers when the senate finally approves the list - visual cases - it is with the feeling of a bad job, but that some measure of justice has been done.

It is of course easy for me to put in this self-satisfied fashion. I have been a professor since 1965, so have never really had to worry. Moreover, like a number of my colleagues who are also beginning to approach their early middle age, I achieved this eminence by taking a very simple and elementary precaution: that of being born at the right time. For if you were a lecturer in your early to mid-30s when the Robbins report was published, in 1963, you could not miss.

It was as if you had, in 1914, been a subaltern with a tragic vulnerability to shells, bullets, poison gas, pneumonia and trench feet. You simply could not avoid ending the war as a colonel.

But for someone joining the Army in 1919, or securing her or his first university teaching job between 1968 and 1981, the statistical prospects were or are somewhat less rosy. And no system of promotion, however ingeniously designed to ensure equality of treatment, can do anything about this all important factor of when you were born.

Like almost all other systems of appointment or promotion in British universities, it also gives an unfair, if inevitable advantage to those whose head of department is endowed not only with a basic generosity of spirit but also with a certain talent for advocacy.

The best intentioned members of the academic staff committee cannot always save their colleagues from the exuberant exaggerations of Professor Pickwick or the linguistic savantry of Professor Scrooge. All they can do is point out, when the final marks are being assessed, that X should not really be published for his or her head of department's idleness; and by that time, the harm is already done.

But even the remedying of these defects would do nothing to change the real unfairness of the situation; more concretely every year, for every year, the quality both of those candidates who are promoted to senior

lectureship and of those who are unsuccessful seems to me to be lower. This is inevitable. Ten to fifteen years ago, the women and men would have been the running for chairs, and now they have deserved being appointed to them. But nowadays, they are caught in a log jam which can be released only by action from within the universities themselves.

First of all, we should abolish the salary differential between professors on the one hand and readers and senior lecturers on the other. It is not very large and in the vast majority of cases over half of it goes as tax anyway. Pumped back into the university system, however, the money could nevertheless raise the approved quota of senior posts from 40 per cent to 42 per cent. This would give the system a little more flexibility and would also be easy to justify on academic grounds as well as on abstract justice.

I am sure I am not the only professor who is acutely aware of a little by way of ability or achievement distinguishes him from his readers and senior lecturers - as well as from some of the lecturers working in the department. To have only two levels in the academic profession instead of the present three would be obviously fairer at a time when there are virtually no promotions being made to the rank of professor and anyone in the upper level wishing to describe him or herself, for social reasons, as a professor, should be entitled to do so.

This reform should, however, be accompanied by a more sweeping permanent tenure to senior staff. This is not the same thing, I have to add, as the abolition of tenure; a teaching position at university, or the imposition of compulsory retirement. I have no desire to dislodge anyone, least of all myself, from a social debt.

What it does mean is that removal of the right to enjoy until the age of 65 a position of privilege and security which one might perhaps have deserved at the age of 40 but which one might equally well have earned to merit seven years later. I know myself how insidious the temptation can be to become one of those senior professors who never quite quit their early promise and I am sure that either, or certain of my colleagues have fully resisted it.

The experience of studying the claims to promotion of a depressing large number of theoretically brilliant colleagues whose achievements seem at least to equal and often to surpass my own has convinced me that the present system is wrong. For it allows me to remain a professor without necessarily doing anything particular to deserve it. They, in contrast, are more or less permanently banned from promotion by sheer statistical pressure.

This system should therefore be replaced by one in which promotion to senior rank remains valid for only seven years. After that, the holder of senior rank - let's call them 'professors' for convenience's sake - would automatically become lecturers again. They would go back to the top of the lecturer's salary scale, so that their children would still be able to eat fresh meat on every other Thursday when the month had an 'R' in it. Then after two further years they could either put in their own application, or persuade a senior colleague to put them forward for promotion to senior rank, this time for a period of five years.

The committee looking at their application would judge them according to criteria similar to those used in the Leeds system to decide on promotions to senior lectureship. They would turn would have to show that they had used their seven years seniority, as well as their two years in the comparative wilderness, to good effect.

I naturally realise that there will be problems. These will range from the logistical - how do we actually arrange the rotation? - through the personal when will it happen to me? - to the legalistic - I was appointed to this chair until age 65 and I'm jolly well keeping it. Nevertheless, I think that it has more than a sporting chance, in spite of the fact that the intrinsic difficulty of reforming one university will be multiplied by a factor of 45.

The author is professor of French literature at Leeds University.

The social function of theatre

London must be one of the few European capitals where anything exciting happens in August. The second London International Festival of Theatre, brainchild of Lucy Neal and Rose de Ward Fenton, has just kept theatre-goers busy for a fortnight, with a total of over two hundred events including discussions, street theatre, workshops and cabaret.

With the diversity of theatrical forms and countries of origin, from Japan to Canada to Cumbria, there was danger of the festival becoming an enormous parade of exotica across the stages of London. To prevent this, and to provide an opportunity to find out more about the context and process of the productions, the organizers had laid on workshops and discussion sessions with several of the groups. Although often sparsely attended, these were extremely useful in building up a comparative picture of the social function of theatre in the different countries represented.

Companies such as Tabule of Sierra Leone, Sistren (a collective of mainly working-class Jamaican women) and Naya of India, all described themselves as community theatre groups, but differences were apparent. Sistren, with *QPH*, a piece concerning the death by fire of 167 destitute women in a Kingston almshouse in 1981, showed the greatest commitment to collective, democratic working. In Tabule's *Boboh Lele*, a lively, didactic tale of the moral confusion of contemporary Sierra Leonean society, a chorus of elders with their communal wisdom formed the backdrop to the individual characters. In *Bahadur the Kalahari*, Naya provided a beautiful spectacle overlaid with a Freudian interpretation of the Oedipus myth. What all three productions had in common was the intrinsic part played by music, dance and ritual, and an overriding sense of a communal tradition. Both *QPH* and *Boboh Lele* incorporated traditional magic, obeah and spiritualist ceremonies - and fundamentalist Christian praise meetings, showing how close the two traditions are, while *Bahadur* used Hindu ritual and ceremonial dances.

The similarities which emerged in performance were accentuated in the discussions, such as that on popular theatre between Sistren, Tabule and Nguigi wa Thiong'o, exiled Kenyan writer whose play *Mother Sing for Me* will be shown in London in December. All agreed that a function of theatre in their countries was to counteract cultural imperialism through celebrating and revitalizing indigenous forms. A discussion between the Naya's director Habib Tanvir and Nguigi concentrated on the vital role of rural and peasant cultures in opposing urban uniformity and neo-colonial cultural values.

Of the western productions, Collective all Parma, with their manic contemporary re-reading of Shakespeare, came closest to the collective, non-hierarchical quality of Sistren. Where the presence of script and director were more evident in some productions, the iconoclastic approach of the Collective towards the original texts was liberating. In contrast, Welfare State, a community group from Cumbria, who enacted *The Raising of the Titanic* in a Liverpool dock, attempted to be anarchic and failed. An extraordinary plethora of theatrical ideas - some, like the Javan shadow puppets or the floating paper lanterns, stunningly effective - did not in the end cohere. The main impression of the evening was one of huge amounts of money spent to bring about a spectacle which tried hard, but had little to say. A truer sense of community, oppositional energy and celebration were to be had from any of the other shows I've discussed. They represent the true spirit of LIFT.

Jane Bryce

Information for inclusion in THE'S arts coverage should be sent to: Lynne Truss Times Higher Education Supplement Priority House St John's Lane London EC1M 4BX



A portrait of Arnold Schoenberg by Richard Gerdtl, from the exhibition VIENNA 1900 reviewed below.

Vienna's dark side

VIENNA 1900 National Museum of Antiquities of Scotland, Edinburgh, August 12 - September 25

Viennese society liked to hide from its own revolutions. When Freud published *The Interpretation of Dreams* in 1900, it took about ten years to sell six hundred copies. Freud's Vienna remains a difficult place to grasp. Born in an age of ferment, its art is restlessly mobile, and refuses easy submission to the gaze of posterity.

Initially, however, this show confronts the visitor with an icon of stability, Georg Zala's imposing bust of Emperor Franz Joseph I. Feathered with the insignia of his crumbling empire, Austria's monarch is a serene anachronism, an embodiment of all those continuities his culture was to shatter. Here, at the start of the exhibition, we encounter the twin myths of a bourgeois optimism, constructed around the ubiquitous figure of the Emperor: permanence and progress.

A plaqueette honouring the Jubilee of 1898 has the calm profile of the aging monarch contemplate his youthful alter-ego across fifty years of continuity. Elsewhere, he presides over the miracle of technology, allegorized as patron deity of Vienna's new fresh water supply. Modern sensibilities prefer the angst of Vienna's avant-garde to the propaganda of its *status quo*. This show concentrates therefore on the dark side of Vienna, on revolution and violence, alienation and obsession.

In 1897 a number of artists, led by Klimt, became disillusioned with the Viennese art academies and formed a splinter group under the banner of Secession. From Zala's impassive Emperor, stultified in marble, to Adolf Loos places him against a flickering ether of blue pigment, and reduces the sitter to his expressive features, crossed like gnarled hand and a face creased like parchment. The composer Arnold Schoenberg, in an extraordinary series of self-portraits he called *Gazes*, carries this process of social disembodiment still further. He reduces himself to a pair of glaring eyes that stare from a face barely sketched in pigment. No longer portraits in any conventional sense, the images present a dematerialized, spectral consciousness. Painting renounces society for psychology, and reaches out to touch Freud.

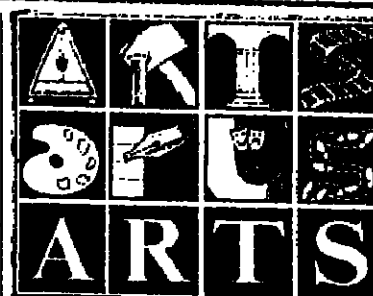
The Secession's furniture and interior design remains curiously cerebral, function demoted for aesthetics. Vienna's artists-craftsmen were significantly influenced by Charles Rennie

Mackintosh, honouring him with a whole room at the Secession's eighth exhibition. (This has been reconstructed, to coincide with the Vienna show, at the Fine Art Society in Edinburgh.) Mackintosh's skinny forms taper in delicate curves, furniture that threatens to evanesce. Drawings are essentially small, functional, declaring that this is Art. If transcendental furniture were possible, this is it. The Wiener Werkstatte (the Secession's crafts association) similarly denature materials in the cause of aesthetics, staining and inlaying wood, creating objects of stunning fragility, like Kolo Moser's precarious pendant lamp. The Secession's craftsmen domesticated the forms of Klimt's dangerous revolution; no longer threatening, the movement gains acceptance as radical chic.

If the Secession began by proclaiming itself publicly, it is marked by art's progressive withdrawal from society. Kokoschka's images, particularly, take the Secession into dark worlds of self-exploration; his *Murder of a Woman* is a frenzy of sadism, its protagonists locked in an orgy of death. Kokoschka's own manifesto is the poster he produced to advertise his lecture on 'the nature of visions'. Scattered and pitted, bald like a victim of surgery, the artist points to a gaping wound in his chest. Kokoschka becomes a strangely transmutated, Christ-like figure, the artist who mutilates himself in the quest for material.

Traditionally, the portraitist embodies his subject in the social hierarchy, indicates his wealth, occupation, status. Late Secession portraiture fascinatingly inverts this tradition, removing its subject from society to present him as psyche. Kokoschka's portrait of Adolf Loos places him against a flickering ether of blue pigment, and reduces the sitter to his expressive features, crossed like gnarled hand and a face creased like parchment. The composer Arnold Schoenberg, in an extraordinary series of self-portraits he called *Gazes*, carries this process of social disembodiment still further. He reduces himself to a pair of glaring eyes that stare from a face barely sketched in pigment. No longer portraits in any conventional sense, the images present a dematerialized, spectral consciousness. Painting renounces society for psychology, and reaches out to touch Freud.

The Secession's furniture and interior design remains curiously cerebral, function demoted for aesthetics. Vienna's artists-craftsmen were significantly influenced by Charles Rennie



Doorways and thresholds

Since he founded it in the mid-Sixties Yuri Lyubimov has made the Taganka Theatre on the outskirts of Moscow consistently a place for controversy, excitement and risk. Working without official subsidy and often skirting official disapproval, Lyubimov and his company have achieved immense popularity.

The Taganka is unashamedly a director's theatre, yet with a difference. The object of his production-style is not so much to display his own prodigious creative imagination as to open out familiar plays and novels in a manner that highlights the searching questions that lie at their base and to project these at his audiences in the style of Brecht as enduring matters of choice. His is a theatre shaped to stimulate and challenge but, though the appeal is ultimately intellectual, ethical and political, the approach is through ritual, surrealist effects, expressionist lighting and an intense physical commitment from his actors.

Watching Lyubimov rehearse a British company at the Lyric Hammersmith, where he is restaging one of his Taganka successes, a dramatization of Dostoevsky's *Crime and Punishment*, has been instructive. Appeals from individual actors that the understatement of emotion can be deeply moving have Lyubimov leaping for the stage to demonstrate the value of a more expansive treatment - he is a virtuoso mime and his facial mobility is a miracle - and the very difference is shocking. The possibilities in expression his method awakes in the actors quickly expose the mannerisms of the English style, above all the reliance on the voice as the prime factor in communication. Playing as here against an almost continuous musical background that often comments ironically on a character's pretensions and on a set composed of numerous tenement doors and swirling black curtains, the actors soon find there is no resource in quiet naturalism.

Lyubimov's aim is for stylization, caricature; inevitably so, since his adaptation of the novel presents not a chronological account of the crime and its consequences, but the quality of Raskolnikov's imagination. Obsessed with the conviction that power is right and with the Romantic notion that the courage to wield power over life and death is proof of an order of being superior to the vermin that make up the mass of humankind, Raskolnikov (Michael Penington) haunts the many doorways, convinced he is on the threshold of some mystical enlightenment, that he will find suddenly the means to step into another dimension of being. The murder has been his proof that he is worthy of distinction; the play we watch, while it uncovers the facts of a crime already committed, focuses relentlessly on the condition that is Raskolnikov's punishment as his expectation grows like a spent candle: living in a petty, grotesque world is inexorable damnation. The sheer banality of it all - quintessentially of Pofferty the police investigator (Bill Paterson) with his haemorrhoids and his apparently bungling attempts to trick people into admissions of guilt - is anathema to him. His crime is more pervasive than the word 'murder' intimates; it does place him outside the normal categories of humanity but fails to invest him with the heroic stature he covets.

The play shows us Raskolnikov's mind utterly broken by event and thrown beyond the reach of pity or forgiveness. The caricature world Lyubimov creates about him is a projection of Raskolnikov's sense of reality: it is the one certain truth about himself and as such his indictment. The whole production-concept sustains a profound ethical vision. Lyubimov excels in a style of rich social satire that rarely graces our stages.

Richard Allen Cave

Dr Cave is lecturer in English at Bedford College, London.

'Crime and Punishment' opens at the Lyric Hammersmith next Wednesday, and runs until October 15.

Events

Continuing exhibitions:

- To September 10, Whitworth Art Gallery, University of Manchester. *Great American Prints: Whistler to Warhol*.
- To September 10, John Hansard Gallery, University of Southampton. *Antithesis to Toponymy*.
- To September 11, British Museum, London. The Japanese print since 1900.
- To September 17, Graphics Gallery, Library, University of Kent. *Work of cartoonist Ewert Karlsen (b. 1918)*.
- To September 17, Ikon Gallery, Birmingham. Albert Irvin, works 1977-1983. Third Eye Centre touring exhibition of Irvin's abstract art.
- To September 18, Abbot Hall Gallery, Kendal. *John Ruskin* exhibition.
- To September 18, Museum of Modern Art, Oxford. Tolly Cabbold Eastern Arts Fourth National Exhibition. Also: Paul Klee, life and work, and Jonquim Oms's photographic *Homage to Miró*.
- To September 18, British Museum, London. *Sparring Life: an anthology of British sporting prints*.
- To September 18, Walker Art Gallery, Liverpool. Goya's Prints.
- To September 25, Walker Art Gallery, Liverpool. *George Stubbs: the anatomy of the horse, drawings from the Royal Academy*.
- To September 28, Kelvingrove Gallery, Glasgow. *The Floating World: Japanese prints*.
- To September 30, Senate House, University of Liverpool. *A View of the Falklands: photographic exhibition*.
- To October 2, Graves Gallery, Sheffield. *Imagined Drawings*.
- To October, Lisbet Gallery, Lincoln. *Private Views: portraits and self-portraits*.
- To October 9, Hayward Gallery and

New exhibitions:

- From tomorrow: Impressions Gallery of Photography, York. *The Glasgow: British magazines of the late 50s and 60s*.
- To September 7, Collin Gallery, University of Strathclyde. *Architects of the Arts and Crafts Movement*.
- From September 10, Cartwright Hall, Bradford. *Ben Nicholson: paintings and reliefs 1919-39*.
- From September 14, Bollerhouse, Victoria and Albert Museum. *Taste: an exhibition about values in design*.
- From September 17, Arncliffe Gallery, Bristol. *Paula Rego*.
- From September 17, Concourse Gallery, Barbican Centre, London. *Realistic Drawings from the Federal Republic of Germany*.
- From September 25, Museum of Modern Art, Oxford. *Stephen McKenna: 113 paintings, drawings and watercolours*. Also: Humphrey Spender: the thirties and after, and John Ruskin.

Events:

- This Sunday, Transport Hall, Edinburgh. Debate on the motion 'Bringing theatre to the people or people to the theatre'.
- October 1, McCraith, David Edgar and Tony Banks.

BOOKS

The torments of trying to write

by Bernard Bergonzi

The Collected Letters of Joseph Conrad, volume one: 1861-1897 edited by Frederick R. Karl and Laurence Davies Cambridge University Press, £19.50 ISBN 0 521 24216 9

Through post-structuralists may claim that the "author" is a mere fiction and that literary texts can only ever refer to other texts and never to "reality", interest in authors as substantial historical figures continues unabated, and there is a steady market for literary biographies, letters, memoirs. The new edition of Conrad's letters - the present volume is the first of a projected eight - is a major work of scholarship. It sheds a fresh but uneven light on an extraordinary personality. I do not think that it will make very much difference to anyone's actual reading of Conrad's fiction; but it offers a new and rich Conradian text, rewarding in its own terms.

Conrad's early letters were written in three languages - Polish, French and English - and the editorial problems must have been formidable; but the editors have worked with tactful professionalism, providing the right amount of necessary but unobtrusive apparatus and commentary. This edition is like a large river into which many smaller tributaries flow, the latter being the several previous editions of Conrad's letters to various correspondents, augmented by many unpublished letters from libraries and private collections in Britain, America and Poland. In dealing with the Polish material the editors acknowledge their debt to the late 1920s when Jean-Aubry's edition of Conrad's letters was first published in French. Many of them to Conrad's distant relation and literary confidante, Marguerite Poradowska, are reproduced in the original followed by English translations.

The editors are politely severe about G. Jean-Aubry, the first editor of Conrad's letters, who transcribed inaccurately and took many liberties with the texts; "this conception of an edition of letters was very different from our own" they remark apropos of Jean-Aubry's deletion of references to Conrad's financial dependence on Galsworthy. "Jean-Aubry's selectiveness plays down Conrad's real plight and indicates how he, as editor, attempted to shape Conrad's image." One should perhaps add that in the late 1920s when Jean-Aubry brought out his editions many people who knew Conrad were still alive, and this might have prompted this silent excision; nevertheless, as this edition makes clear, there has been a great revolution in editorial method since then.

The correspondence not only opens in 1861, with a charming little note written by the three-and-a-half year old Polish boy to his father Apollon Konarski, his mother guiding his hand. It remains a precious but isolated fragment, and the next surviving letter is dated 1883, when Conrad had been serving for several years on British merchant ships and was on his way to becoming a British subject. As Laurence Davies acknowledges in his introduction to volume one the gaps in the correspondence are substantial.

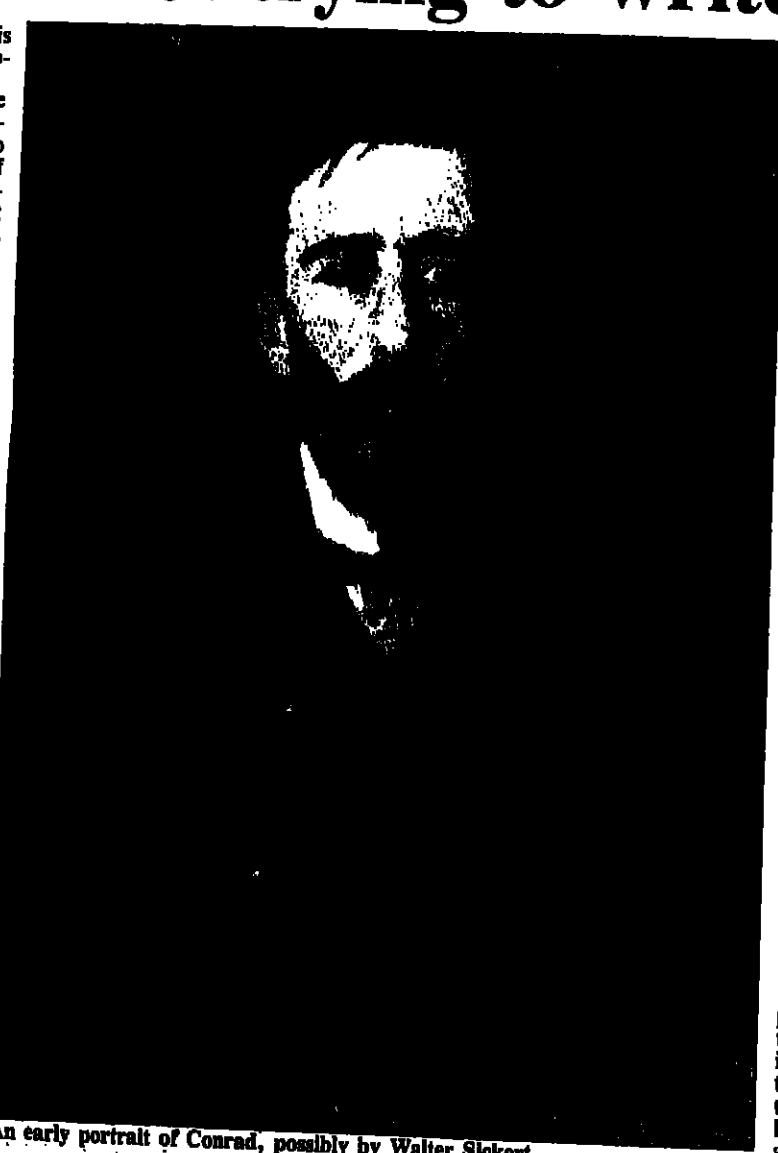
We have nothing from Conrad's adolescence, nothing from his turbulent journey in Marseilles, nothing from his earliest years in the Merchant Navy. Such absences must, to some extent, be the result of actual loss, brought about by war and revolution, fire and water, the discretion of the indifference of succeeding generations. But it has not been the ideal location for family archives.

And yet, as Mr. Davies adds, Conrad only left his native land at that many years during those years when he was changing countries and allegiances and seeking to have had many close friends and family. It was not easy to conduct a regular correspondence when his life was a series of moves on and off. The greatest loss that we do

know about is of Conrad's letters to his guardian and uncle Tadeusz Bobrowski.

Most of the letters in volume one survive from the 1890s, covering Conrad's change of course from seaman to author, following the publication of *Almayer's Folly* in 1895 and the subsequent friendship and encouragement of Edward Garnett. That novel was written slowly over several years, in spare time snatched from seamanship, but Conrad scarcely refers to this literary work in progress in his letters of the early nineties. He mentions it in a letter to Marguerite Poradowska in January 1894 - an entertaining letter, written when Conrad acknowledged being somewhat under the influence of "des liquors spiritueux" - as something that he will let her read when it is finished, and it was in fact completed in April of that year. It was accepted by Fisher Unwin the following November. When it was published some reviewers, at least, were approving, notably H. G. Wells, who gave the book warm if qualified praise, prompting an appreciative response from Conrad. *Almayer's Folly* was followed by *An Outcast of the Islands* and a number of short stories with East Indian settings. Conrad was regarded as a writer to be taken seriously, even if his was largely a *succès d'estime*. Yet he was radically self-doubting and for several more years he half-entertained the idea of going back to sea. For most novice writers the first sight of their work in print at proof stage is peculiarly thrilling, but Conrad was appalled when he received the first proofs of *Almayer's Folly* on Christmas Eve 1894. He marked in a postscript to a letter to Marguerite Poradowska, "Je n'ai eu horreur. Absolument horreur de la chose imprimée qui a l'air si bête - pleure de ses". Even when he was becoming established he could be coldly self-critical; in August 1896 he described a short story to Edward Garnett as "a tricky thing" with the usual forest river - stars - wind sunrise and so on - and lots of second-hand Conradese in it. Conrad needed frequent encouragement to go on writing at all and Garnett provided it. The following year Stephen Crane wrote praising *The Nigger of the 'Narcissus'* in the highest terms, and Conrad, who liked and admired Crane, was deeply moved.

I am not more vile than my neighbours but this disbelief in oneself is like a taint that spreads on everything one comes in contact with; on men on things - on the very air one breathes. That's why one sometimes wishes to be a stone breaker. There's no doubt about breaking a stone. But there's doubt, fear - a black horror, in every page one writes. You at any rate will understand and therefore I write to you as though we had been born together before the beginning of things. For what you have done and intend to



An early portrait of Conrad, possibly by Walter Sickert.

do I won't even attempt to thank you. I certainly don't know what to say, tho' I am perfectly certain as to what I feel.

The self-doubt led to agonizing writer's blocks; there is much discussion in these letters of the torments Conrad underwent in trying to write his third novel, which he eventually abandoned and then completed and published many years later as *The Rescue*. When he turned instead to write *The Nigger of the 'Narcissus'* he touched a creative

experience, the writing of fiction being an activity that allowed "dreams and disappointments" to be acknowledged, recorded, and sometimes transcended.

Given that Hankin's aim is to establish the "psychological bases" of Mansfield's stories, it is not surprising to find that Mansfield herself was constantly harking back. By carefully including the surviving fragments of a proposed autobiographical novel, "Juliet", begun at the age of seventeen, Hankin demonstrates that already in Mansfield's youth she tended to see herself as two distinct people and to use art as a way of transforming anxieties into sumptuous fantasies. What we are shown here is a girl burning with resentment and self-loathing, despite an apparently pure and harmonious family life; the title of one early piece, "Misunderstanding", encapsulates the feelings projected and also hints at the self-city and sentimentality which pervade these attempts to escape into an imaginative realm where the author holds all the power.

Fortunately, Hankin is not trying to claim artistic merit for Mansfield's turbulent apprenticeship work. Rather, the juvenile are used as the starting point from which can be traced a "steady movement" away from immersion in the fantasy to a position from which she can record the disastrous effects of like Beryl in "Frieda"; or indeed the "Frieda" itself. Yet although Hankin provides a strong case for Mansfield's artistic development, the biographical account which is offered, in parallel with discussions of individual stories,

reveals not "steady movement", but a kind of desperate lurching. In fact the suggestion is made that Mansfield's bursts of creative activity were closely associated with, perhaps even dependent upon, her frequent journeys of tional distress, among which must be included her marriage to Middleton Murry.

It is significant that Hankin should find Mansfield's greatest achievements in the mature New Zealand stories, rather than the sense of return is stronger than that of escape. In these, as Hankin indicates, symbolism is more delicately handled than previously, and Mansfield manages to convey universal meanings without becoming vague or portentous. A crucial step towards this mature, distanced manner was: the writing of "Prelude". It began out of a sort of revolt about Mansfield's childhood, to which her memory returned with new intensity when her brother Leslie was killed in 1915. The various factors involved in the creation of this story over a period of more than two years are fully explored by Hankin, who also shows Mansfield bringing together several themes which had been treated earlier, but separately.

"Prelude" represented an advance in method too, with nuances and atmosphere playing a greater part, and the being combined within a kaleidoscopic picture. Just how deliberately Mansfield was turning herself into what she later described as a "selective camera" can be seen by comparing the finished first draft, printed by Murry as "The text of 'Prelude'" and the more polished version, which is the one we read today.

vein directly linked with his personal experience and progress was not easier; the result was a highly original one of Conrad's finest achievements in fiction.

Laurence Davies writes perceptively in the introduction about correspondence as a literary mode: "It is hardly startling to find that a letter writer modulates his tone to suit the interests of his correspondents. Who does not?" But, as he says, Conrad does more than most; the tone of his letters is exquisitely adjusted to the personality of the recipient; indeed, we can sense the reader implied by the letter. It is correspondingly harder to grasp the "essential" author than it is with letter-writers whose consistent personality is apparent in everything they write, such as D. H. Lawrence, Dickens, Virginia Woolf, Byron, Henry James. What Davies calls Conrad's "ceremonious politeness" always colours his letters. Yet more than that or politeness may have been involved. In March 1896 Conrad observed to Edward Garnett, "when one's own personality is so much one's own personality only a ridiculous and aimless masquerade of something hopelessly unknown the attainment of serenity is not very far off". This anticipates some of the famous formulations of twentieth-century modernism: Lawrence describing the "old stable ego - of the character" (also in a letter to Edward Garnett, nearly twenty years later), or Eliot denying the importance of personality.

It is at such moments in this correspondence, and they are not numerous, that one is in touch with the deep implications of Conrad's art. Against the ever-present possibility of dissolution and nihilism he had to assert some kind of form and order as he available; what Laurence Davies calls "a Polish gentleman's loyalty to the code of his ancestors" and a ship officer's conviction that everything must be done in the proper way. We get a fresh understanding of Conrad's human qualities from these letters; they also show how far the complex relation between order and chaos which has become a commonplace topic in the critical discussion of Conrad's fiction - was central to his own sense of himself.

Bernard Bergonzi is professor of English at the University of Warwick.

compelling, however, than any of the expertly conveyed editorial information, is the impression left of psychological affinities between the writer and the diverse temperaments she portrays. In neither version of the story there is any single emotional identification: uncertainty and almost total digressivity. Mansfield "becomes" the sexually troubled Leah Burrell; Beryl, unable to decide what her true personality - if indeed she has such a thing - actually is, and the nervous child Kestrel.

"That is the satisfaction of writing," Mansfield once wrote in a letter, "you can impersonate so many people." This was freedom, then, it certainly didn't provide satisfaction in life. When we find C. A. Hankin concluding that "the philosophical and emotional maturity" of Mansfield's late stories ("At the Bay", for example, and "The Garden Party") suggests that "she might have come close to feeling her store", it is difficult not to feel as though this kind of confessional interpretation discloses the limitations as well as the forcefulness of Mansfield's type of art. It seems that she was running out of "selves" to impersonate, masks to wear, and emotional dramas to document. Surely this is why, without denying Mansfield her vital place in the rise of the modern short story, we are unlikely to follow Hankin all the way and see Mansfield as belonging to the tradition of autobiographical writing that includes such major figures as Proust and Dostoevsky.

Valerie Shaw

Valerie Shaw is lecturer in English at the University of Edinburgh.

BOOKS

Race and class

Volkskapitalisme: class, capital and ideology in the development of Afrikaner nationalism 1934-1948 by Dan O'Meara Cambridge University Press, £22.50 ISBN 0 521 24285 1

Dr O'Meara has produced a major contribution to the Marxist history of South Africa, a style of history which has, for some years, sometimes given the impression of becoming a new orthodoxy, and which now, after a long period of gestation, is giving birth to important texts. Of course, a reaction will come (one has only to observe the divisions in the African nationalist movements) but meanwhile O'Meara's study of Afrikaner nationalism since 1934 will be influential.

O'Meara, who disapproves of capitalism whether or not it oppresses Africans, seeks to show that Afrikaner nationalism can only be properly understood if it is seen as an epiphenomenon of changing class alliance within Afrikanerdom, and not as an expression of national or tribal consciousness. He deplores, therefore, the view (to which I subscribe) that South Africa's problem is primarily a problem for Afrikaners, because they hold the power in most walks of life. I do not think he believes this view actually to be untrue, so much as inadequate, because it fails to examine the underlying material conditions which make ideology comprehensible.

The book is not merely a contribution to the race/class debate, about whether and to what effect racial (or, in this case, Afrikaner) consciousness should be allowed to explain South African history. O'Meara has also done outstanding archival work, building in part on such authors as Adam and Gilmore (though he disapproves of their eclectic approach) on the detailed involvement in the economy of the many ethnic organizations which contributed to it. The author is already well known for his expertise on the history of the Broederbond, to which he now adds a formidable range of evidence on many other bodies, both economic and political, concentrating on those which contributed to the economic movement of 1934-48. His bibliography is splendid and, unlike many authors on South Africa, he includes numerous Afrikaans sources.

The Broederbond was the most important body of all. In the 1930s, as O'Meara recounts, it redefined Afrikanerdom and Afrikaner nationalism, stimulated the growth of Afrikaner ethnic unions and masterminded the emergence of Afrikaner capitalism, which until the second economic Volkskongress of 1950 had to be dressed up in the Christian-nationalist clothes of ethnic solidarity and the belief that class antagonism was no better than treachery to the interests of the Volk. Of course, some leading Afrikaners really did believe that capitalism was an expression of alien, imperialist, domination; the paradox was that that hatred of capitalism could itself only lead to the emergence of a new capitalism.

In the 1940s O'Meara goes on, "it was this ideological, cultural and economic mobilization of the Volk for economic ends which shaped and defined Afrikaner culture and the developing nationalist movement." The aim, and achievement, of the Broederbond was to transform Afrikaner attitudes to capitalism; so that Afrikaners could admit that they were indeed capitalists, without incurring the dreaded "Hogendaeler" epithet. Finally, the nationalist victory of 1948 (although gained with only a minority of the votes cast) signalled the failure of the United Party to satisfy the conflicting demands for African labour of the uneasily allied classes which it represented, and the success of the National Party in drawing the various interests (excluding those of the Afrikaner working class) together in what the author nicely terms "ideological condensation".

A short review cannot do justice to the material O'Meara deploys, but

there are questions to be asked. At the general level the Marxist view of history brings obvious benefits - it would be foolish not to wish to know about the interplay of economic forces - but it is really the only way, and it is not, what kind of evidence would Marxists accept as tending to undermine their approach? Second, we are faced with the problem of intention. To what extent did the Broederbond think out and plan the events that came to pass?

More specifically, the book is not just about capitalism, but Afrikaner capitalism. The Broederbond, and all the other organizations which O'Meara has so thoroughly researched, were run by Afrikaners, and exclusively for Afrikaners. What principle of exclusion, therefore, could they possibly have operated except the ethnic, and in that case is not the notion of ethnic consciousness, which the author so much deplores, of value as an explanatory variable, in conjunction, rather than competition, with that of class struggle? Furthermore, if the practices of apartheid are primarily to be explained in terms of the accom-

modation of rival fractions of capital, most of those practices seem quite unnecessary.

Finally, why should Afrikaner proto-capitalists have been concerned about the development of Afrikaner capitalism, rather than one blind to ethnicity, and why are English and Afrikaans-speaking businessmen so different from one another? The latter still tie themselves in terrible knots when they seek to reconcile apartheid and "common sense", whereas the English speakers carry no such ideological burden and are inclined to see most of the apartheid system as drivel.

These are large questions. They do not betoken an attack on Marxism *per se*, but rather a plea for a measure of admission of the legitimacy of race and class if South African history is to be understood.

Christopher R. Hill

Christopher R. Hill is director of the Centre for Southern African Studies at the University of York.

African slavery systems

Transformations in Slavery: a history of slavery in Africa by Paul E. Lovejoy Cambridge University Press, £25.00 and £7.95 ISBN 0 521 24369 6 and 28646 8

Drawing on a very wide range of publications (especially within the last two decades) on slavery within Africa and the slave trade from it, Professor Lovejoy has produced a scholarly survey of African slavery from the fifteenth century to the beginning of the twentieth.

He emphasizes particularly the relationship between slavery within Africa and the external slave trade, and demonstrates how indigenous African slavery was influenced by the international slave system of the modern European world. Professor Lovejoy's horizon, however, is not limited to West Africa, to the most nefarious nexus of this system. He ranges over the whole of the continent north and south of the Sahara, and out into the African islands, especially in the Indian Ocean. Furthermore, although limited by the relative paucity of research on southern African slavery, he includes a helpful chapter on slavery in central, southern and eastern Africa in the nineteenth century.

Intervened with this most convenient and well-documented survey are a number of theoretical considerations which should be of particular interest to all who are concerned not only with the economic study of slavery but also with the development of Marxist and quasi-Marxist thought on Africa since the end of the Second World War. Professor Lovejoy's remarks on "slavery as a mode of production" are especially interesting in this respect.

He modestly calls his book "an intermediate stage in research and analysis", although it is clear that the intermediate stage in research and analysis is much more than a simple synthesis. Professor Lovejoy provides well-considered opinions of romanticism at work in African historiography, and attempts to correct the view that indigenous slavery in Africa was insignificant. As he puts it: "The aim of many historians has been to glorify the African past for reasons related to emergent nationalism. In Africa and the sentiments of people of African descent in the Americas. This has made it difficult to discuss the inglorious past."

Transformations in Slavery concludes with a useful chronology of measures against slavery in the period from 1772-1962. ("Saudi Arabia becomes the last country to abolish the legal status of slavery") and with a detailed bibliography which should prove of considerable help to the specialist as well as the beginner in African history. However, there are a few curious omissions; for example, no reference to the writings of the Afro-American historian, W. E. B. Du Bois, or the works of David Livingstone, to whom, indeed, there is only one refer-

ence in the text.

Transformations in Slavery, the thirty-sixth volume in the African Studies Series of Cambridge University Press, is a valuable contribution to an important series. It is good news for the student that this book appears in paperback at the same time as M. J. Fintley's *Ancient Slavery and Modern Ideology*.

George Shepperson

George Shepperson is William Robertson Professor of History at the University of Edinburgh.

Changing too slowly

Change in South Africa: blind alleys or new directions? by Christopher R. Hill Rats Collings, £12.50 ISBN 0 86036 200 0 The Uneasy Relationship: Britain and South Africa by James Barber Heinemann Educational, £13.50 ISBN 0 435 83042 2

For no other country in the world does the question of the direction of future change dominate as it does in the case of the Republic of South Africa. Yet as the irresistible force of African nationalism confronts the immovable object of white domination it is also more difficult to predict than anywhere else.

Hill's somewhat loosely structured book is essentially a discussion of two parallel debates on change. The first is that going on among academic commentators, loosely divided into Marxists and non-Marxists; the second is that being conducted among the white elites of South Africa. The former is primarily concerned with whether or not the latter is worth considering. For the Marxist left, peaceful change is not only unlikely in South Africa (a conclusion with which many non-Marxists might well agree) but it is also undesirable. For them the problem is ultimately not one of race, but one of class: real liberation can only come with the overthrow of the capitalist system. African nationalism as such is invalid and misleading simply because 'it is nationalistic'.

In his discussion of this first debate, it seems to me that Hill is unnecessarily equivocal, not because the Marxist position on South Africa is untenable but because if it were tenable (there would be no point in entering the second debate which resolutely excludes the Marxist alternative. However, it is in his discussion of the formation of white elite political thinking and the changes which have developed from it that Hill has made an important contribution to our understanding of the situation.

Hill's analysis leaves the reader in no doubt that real change is taking place in South Africa. Symbolized by the Winnie, Riekert and Schabane commissions, there have been significant developments (which are not "blind alleys") in such fields as petty apartheid, job reservation, trade union

legislation and the homelands/Bantustan policies. On the latter, Hill comments astutely that "the South African government seems to be in the process of accepting that the old homelands policy is dead, whilst of course proclaiming that it is alive and well".

This raises the possibility, widely argued over in South Africa and discussed at length in this book, of some sort of confederal solution to the country's predicament. Such a solution would be a compromise of a majority-rule unitary state and the supporters of the maintenance of white dominance, and would have to be very different from the post-1948 Bantustan scheme. In what form, if any, such a solution would be acceptable to a majority of the black population, will remain unknown so long as they are excluded from the discussion.

The major impediment to any optimistic view of South Africa is not that change is not taking place, but the pace of that change is unbearably slow and faltering and may well simply be overtaken by events of a more violent kind. As Hill demonstrates so clearly, the constraints placed on government by its own white electorate inhibit the pace of change. This was seen in 1982 when Prime Minister Botha's very moderate proposals on limited power sharing with Coloureds and Asians were met with a revolt in his own National Party, leading to the founding of the Conservative Party by Dr Treurnicht and to the increased electoral support for the neo-fascist Herstigte Nasionale Party. It is hard to disagree with Hill's conclusion that "the prospects of sufficient change being achieved to satisfy the majority of South Africa's population are slim, but they still exist".

Barber's short, attractively written book provides a clear useful exposition of the complex relationship between Britain and South Africa and the huge range of interests and pressure groups involved in it. As approached by Christopher Hill describes more briefly South Africa's relationships with France and West Germany. Arguments concerning relations with South Africa abound in this country and while this book carefully avoids advocating any particular policy, it shows clearly the various cross-pressures within which policy is formed.

John A. Wiseman

John A. Wiseman is lecturer in politics at the University of Newcastle upon Tyne.

Not on the sidelines

Black People and the South African War 1899-1902 by Peter Warwick Cambridge University Press, £25.00 ISBN 0 521 25216 4

The South African War of 1899-1902 is generally thought of as a "white man's war", fought between British and Boers with a tacit understanding that the African and coloured peoples, who made up four fifths of the population of the area, should be excluded from the conflict. Most books about the war have assumed this framework. Now, in this important book, Peter Warwick explores a dimension of the subject which has hitherto been lacking.

Both sides depended upon black and coloured people for non-combatant duties and Peter Warwick estimates that over 100,000 acted as scouts, spies, guards, servants, messengers, and labourers on the British side alone. In the concentration camps established by the British it is well known that over 20,000 Boer women and children died; but the deaths of some 14,000 of the 116,000 Africans kept in similar camps have been less widely acknowledged, as have the deaths of large numbers of Africans in the sieges of Mafeking and Kimberley. Most controversial of all, at the time, were the mutual accusations by the white protagonists that guards were being used as armed combatants - the Boers shot any African or coloured caught carrying a firearm or, latterly, wearing a British uniform. Yet Lord Kitchener himself admitted arming over 10,000 Africans, and coloureds, and Peter Warwick is inclined to put the figure at 30,000, as Lloyd George asserted at the time.

None the less, this book breaks new ground and its conclusions must change our overall perception of what was not just an Anglo-Boer struggle but a South African war involving the majority of the population.

Iain R. Smith

Iain R. Smith is a lecturer in history at the University of Warwick.



A victim of police shooting in Soweto, 1976, taken from *Apartheid: the facts* (International Defence and Aid Fund for Southern Africa, £3.00).

Certainly, on the British side, armed African and coloured scouts and blackhouse sentries played an important part in the guerrilla phase of the war after the republics had been annexed in 1901.

On the Boer side, also, Africans were extensively used for all types of auxiliary work (scouting, intelligence, transport, rifle-loading etc) and as servants and conscripted labour. But the evidence is less conclusive with regard to armed combat. On specific occasions, as at Mafeking, blacks did fight alongside whites - as Smuts admitted - but this would seem to have been exceptional.

The greatest achievement of this book is that it explodes the myth that the African population stayed on the sidelines as passive spectators or reluctant recruits to the conflict. On the contrary, wherever Peter Warwick has looked he has found the African population actively involved and attempting to use the situation provided by the war to further their own interests.

For the rulers of many of the African societies, so recently incorporated within the colonial regime, the war provided a context for those who collaborated with the British to secure their advantage over rival clans and factions. As with Khama (Bechuanaland) and Lerotoli (Basutoland) so with Dinuzulu (Zulu-land) and, to a lesser extent, the Dlamini ruling elite in Swaziland. In South Africa as a whole it is clear that the British enjoyed widespread support and assistance from black and coloured people during the war, many of whom believed that the defeat of the Boers promised a new and better future for Africans, especially in the republics.

The Boers, in contrast, were faced with internal divisions and defections and mounting African depredations on their farms and livestock. The wholesale conscription of African labour at reduced wages on the Rand and elsewhere and the increasing resort to violence and coercion as the war continued led to the Boers confronting an African threat in their own areas in addition to the British army. In the peace discussions at Vereeniging in May 1902 this was one of the important factors contributing to the Boer surrender.

The African population in South Africa was not a unity, however, and what we have in this book is a well-founded and vivid account of the situation in certain, selected areas, where the evidence is strongest. The evidence is weakest, for the two Boer republics, though the book makes good use of material on the mining area of the Rand. There is an imbalance here which recurs repeatedly in accounts of the Boer War.

None the less, this book breaks new ground and its conclusions must change our overall perception of what was not just an Anglo-Boer struggle but a South African war involving the majority of the population.

Iain R. Smith

Iain R. Smith is a lecturer in history at the University of Warwick.

BOOKS

A Greek lacuna

The Theory of Will in Classical Antiquity
by Albrecht Dihle
University of California Press, £21.25
ISBN 0 520 04059 7

The message of these subtle and massively learned Sather Lectures is that the ancients had no theory or developed concept of will. The notion of the will of God entered philosophical speculation only when, in the time of Galen, Greek thinkers came to see how alien biblical ideas were to the rational cosmology of their own tradition. Introduction of *voluntas* as a key tool in the analysis of human psychology was an even later innovation, the fruit of the intense introspection and self-examination of St Augustine.

Dihle seems to be in no doubt that the Greeks would have been better off as philosophers and psychologists of action if they had elaborated such a concept themselves. He finds their notorious intellectualism incapable of providing satisfying solutions to problems which would yield - he implies, but frustratingly does not attempt to show - to a Kantian-style theory of will. Failure is invariably more interesting and instructive than success, and indeed the Greeks emerge from Dihle's inquiry as distinctly heroic. Not only did they formulate ingenious and powerful theories of action despite their neglect of the will (Aristotle says Dihle's particular admiration in this regard), but from time to time in literature and philosophy they generated just the concepts and problems which might have grown into the theory of the will that they needed.

These theories, concepts and problems constitute the matter of Dihle's book. Its range is astonishing. In his search for signs of recognition of the will in the cracks of Greek intellectualism, Dihle explores not only much of Greek literature and virtually the whole of Greek philosophy of mind through its thousand-year history, but Jewish thought (particularly Philo), Christian theology (beginning with St Paul), gnosticism, and much else besides. He has rewarding observations to make on an enormous variety of topics in these areas, from the Stoic and Platonist theories of prayer to Roman wills to the significance of the letter Y in Pythagoreanism. The book could be recommended for its endnotes alone, furnishing as they do a guide to the literature ancient and modern of a vast intellectual landscape, including many substantial essays of independent interest, particularly on vocabulary and the development of usage.

Dihle's work is in fact built on the study of usage, and it is here that he writes most imaginatively and (in a richly instructive book) most instructively. I think, for example, of a couple of Diodorian pages on *menos* ("spirit", "passion", "purpose") in Homer. Dihle takes this to be the only archaic concept - "through which intention could be grasped independently of both cognition and emotion", yet a concept employed only when "yet a standing energy" is displayed, "the irresistible impulse to action", not in normal psychological vocabulary, and soon to be discarded (he claims) altogether.

Two other words with quiet histories, but greater survival value, Dihle illuminates as a contrasting pair: *tozina* ("risk-taking decision"), destined for an important volitional role in Platonist thought, and *aidos* ("restraint", "shame"). *Aidos* is a dominant concept in Hesiod and Pindar, as here seen in their interplay in Greek tragedy. *Aidos* is intimately related to yet another barely translatable word, *ephoros* ("sound thought", "reason", "good sense"), whose examination by Plato in the *Charmides* is given fresh life and interest by Dihle. He thinks it cries out for a volitional analysis, and is not surprised to find that Socrates's explication of an intellectualist approach to definition of the concept brings him insoluble problems. Pages after page filled with thoughtful observations on the kind on Greek, Latin, Hebrew and



The fourth-century Roman Emperor Theodosius is depicted here (left) on a sculpted base which supported an Egyptian obelisk in the Hippodrome at Constantinople. The picture, by Werner Forman, is reproduced from *Byzantium: City of Gold, City of Faith* by Paul Hetherington (Orbis, £10.00).

Syriac writers of the whole classical era.

This book is the work of a man who has read widely about human nature with much wise and understanding attention, and who wants to expound it to us as plainly and carefully as he can. This is not the only ideal to which classical scholarship can aspire. But it is an admirable one, here realized with great authority.

Malcolm Schofield

Malcolm Schofield is a fellow of St John's College, Cambridge.

Persian royalty

The Persian Empire
by J. M. Cook
Dent, £12.95
ISBN 0 460 04448 6

The Persian empire, ruled for 220 years (550-330 BC) by the Achaemenid dynasty, stretched over a vast territory than any of its predecessors, rose to power with almost the lightning speed of Alexander the Great's conquests and was to be unsurpassed in durability until the Roman empire.

Although its roots lie in the rising power of the Medes, expanding beyond their homeland in western Iran, it can justifiably be dated as emerging at a fixed date, with the victory of Cyrus the Great over his grandfather Astyages, king of the Medes, and the consequent unification of Media and Persia, to form the nucleus of the military, political and political leadership of the new empire (550 BC). Following the fall of Nineveh and the disappearance of Assyria, by the mid-sixth century BC there was an air of stagnation in the ancient civilizations of Babylonia and Egypt, a power vacuum into which stepped Cyrus the Great with his formidable highland infantry and cavalry. From his quasi-feudal power base, he overran the Median realm, entered Babylon in Lydia and then the Egyptian empire in the short span of eleven years. He went on to have achieved his successes largely by conquest of those peoples submitting to his rule; his name for tolerant paternalism being, traditionally strong among the Jews.

After Cyrus the Great the spirit of the Persian empire underwent a far-reaching change, with the annexation of Egypt by Cambyses (525 BC) and the seizure of the throne by Darius I (522 BC). The power of Darius I had been gained with the support of Persian noblemen of seven leading families, but at a price which was to have a direct bearing on the slow but inexorable decline and decadence of Persian imperial power. Not only were the Medes subordinated to the Persians as never before, since they had the opposition to Darius I, but the Great King deliberately distanced himself from his heterogeneous subjects, while systematically re-organizing the administration of the empire.

After Cyrus, himself slain in battle east of the Caspian Sea, leadership of the field was normally delegated to generals, increasingly of the blood royal. A chronic weakness of the Achaemenid government, as Professor Cook aptly observes, was the absence of a consultative body to whom the Great King could turn for advice in times of crisis. The corollary of this was growing isolation of the king, surrounded by flattering courtiers and hemmed in by eunuchs and sons of his concubines. Greek writers attest the luxury of the Persian court and of the dress of the king himself.

Inevitably, much of this book deals with the war against the Greeks in the reigns of Darius I and his son Xerxes, ground more familiar to many readers than matters relating to lands east of the Greek cities of Asia. The author may be right in asserting that there were far more Greeks in the world than including the Ionians, available to Xerxes in 480-479 BC, would certainly have acquired themselves more effectively if better led. Alexander the Great was to show that mere numbers were never an essential ingredient of victory in battle.

The outstanding merits of this book are its breadth of treatment and lightness of style, the author's own dry humour appearing from time to time, reinforced by apt references from Herodotus and other Greek sources, by pointing to the few individuals could be portrayed as he studied words of Darius I in his famous rock inscription at Behistun. The limitations of Greek sources are frequently and rightly emphasized in terms of bias and coverage, most notably in the very meagre evidence for the vast eastern provinces, or satrapies, of the Persian empire. Those beyond the Hindu Kush in the north-east, were dominated by eastern Iranian with cultural traditions to some extent distinct from those of the regions of the Persian empire in touch with, or still belonging to, the ancient Near East.

Neither Babylonia nor Egypt was ever deeply affected by Persian culture, but rather the reverse. Professor Cook has proved that impeccable classical training need not

obscure the more distant vision required to begin to comprehend the Persian empire, a remarkable historical phenomenon by any reckoning. Discussion of religion, provincial administration, geography and the art and life in the royal palaces add flesh and blood to the political history. For the serious student and the determined general reader, this work will long remain indispensable.

Charles Burney

Charles Burney is senior lecturer in near eastern archaeology at the University of Manchester.

Athenian society

The Family, Women and Death: comparative studies
by Sally Humphreys
Routledge & Kegan Paul, £15.00
ISBN 0 7100 9322 5

Welcoming an earlier volume of Sally Humphreys's studies of ancient Greek society, *Anthropology and the Greeks* (THES, March 24, 1978), the late Professor Robert Ogilvie expressed serious reservations about the application of social anthropology to ancient history, reservations which may well be fairly widely shared among classicists. But he underestimated the complexity, and the significance, of the enterprise Humphreys is engaged upon, evident in this new collection no less than in the last.

In the first place, Ogilvie wrote as if what was in question was the straightforward application of anthropological data and results, whereas Humphreys employs concepts, ideas and methods derived from history, sociology, psychology, linguistics and economics as well as from anthropology, and does so with impressive breadth and sophistication.

Secondly, and more importantly, Ogilvie argued that while the application of anthropological data had its uses, it could only tell one about areas of ancient societies on which the ancient sources were silent, and these, he claimed, were less central and fascinating than the major historical figures, the great writers and the best works of art.

Yet the essays in this book centre on the relations between the two fundamental institutions of Greek communities, the family/household (*oikos*) and the city-state (*polis*), and the related divisions between male and female roles and between public

and private spheres of action. These are issues on which ancient sources, if not as abundant as we should like, are anything but silent, at least for classical Athens. As Humphreys points out, they are basic concerns both of the surviving lawcourt speeches from Athens which provide so much of our evidence for Athenian social life, offering both vignettes of good and wicked behaviour and the "proper" judgments of them, and equally of the major art form of Athens, the drama of Aeschylus, Sophocles, Euripides, Antiphones and Menander.

Three approaches are fundamental to Humphreys's comparative methodology. First there is a concentration on the specificity and idiosyncrasy of each individual society. She does not normally advocate extended comparison between one society and another (for example, classical Athens with a modern Mediterranean peasant society), but may make a variety of comparisons, for specific purposes, of ideal types or models of particular institutions between any societies, pre-industrial or industrial. She takes the view - common to many of the varieties of structuralism - that each society has its own distinct, systematic and ideologically significant ways of dividing up and classifying its social life into public and private spheres, or notions of the "natural" functions of men and women, from excellent examples, studied in detail in this book.

Secondly, there is a healthy insistence on the complex and changing nature of Athenian society, which by the late fifth century had developed a number of different social groups and institutions, with conflicting values and ideologies; Athenians were often forced to choose between differing moralities and conflicting loyalties. Here Humphreys makes use (if tacitly and undeveloped) of Erving Goffman's ideas of how societies put pressure on individuals to meet challenges, in the interpretation of "action" as "character" in the three Athenian tragedies. She also draws attention to Pierre Bourdieu's suggestion that we should move from establishing the norms of a society towards the analysis of the strategies individuals adopt to cope with problems which arise within the framework of the society's particular value-structure.

Thirdly, she shares with her co-laborator of long-standing, Annalino Momiagiano, the concern to study systematically the roles, motives and methods of intellectuals, in the ancient and in the modern world; and is aware of the contemporary interests that help to determine scholars' choices of subjects and methods, her own no less than those of others.

The articles in the first half of the book offer generalizations and hypotheses about the family, gender, and *polis*. Humphreys suggests that many of the tensions and conflicts of loyalties evident in Athenian society, of the types of arguments found in the political arenas and lawcourts, and of the anxieties over familial relationships explored in the plays, become more comprehensible if seen as responses to an increasing awareness in the society of the separation between public and private spheres. These arguments, carefully and precisely stated, but without full analysis of texts cited in support, depend upon her attempt to identify changes and developments in institutions, attitudes and patterns of behaviour, between, for example, the archaic world (the world of "Homer") and the classical, or between the fifth and sixth centuries; such attempts are necessarily delicate and risky. Some of her generalizations and arguments will provoke qualification and disagreement, as she herself is hoping.

The other papers in the book concern family tombs and family and the treatment of death. Here too there is a fruitful combination of scholarship, interesting hypothesis and stimulating research. Though all but one of the papers have been published before their collection in this book makes them available not only to classicists and ancient historians, who will find much to provoke and interest them, but also to all those who are concerned with the variety of social responses to the universal phenomena of gender, family, politics and death.

N. R. E. Fisher

N. R. E. Fisher is lecturer in classics at University College, Cardiff.

BOOKS

Pattern and process

The Secular Ark: studies in the history of biogeography
by Janet Browne
Yale University Press, £21.00
ISBN 0 300 02460 6

Biogeography today is a subject of conflicting opinions. There are biogeographers who believe that animal and plant distribution can be understood only through a study of fossil history while their opponents deny the possibility of ever recognizing an ancestor for certain or its true place of origin.

For the latter the correct study of distribution is not palaeontology but numerical evaluation of modern floras and faunas. Once indices of similarity and dissimilarity are constructed, patterns of change, migration, diversification and extinction will emerge, and past histories, if of any value, will be inferred from them. Again, some biogeographers believe that dispersal and speciation have been important; others, "vicarisms", that only the break-up of once continuous populations by geological events gives rise to differentiation of floras and faunas.

As Janet Browne's scholarly study shows, these differing ideas have existed for three centuries. The story begins in the seventeenth century with Athanasius Kircher's ark, which could accommodate all known animals in comfortable stalls. A belief in the story of the ark implied that all modern animals emanated from one place (Ararat) after the flood and had subsequently migrated to their present homes. But literal belief in an ark became impossible with the rapid accumulation of new plant and animal collections from all over the world.

The ark became overcrowded and had to be abandoned, so other ideas had to be explored: if all animals were not at one time in the ark, perhaps they had been created in different places and had never moved. Eberhard Zimmermann had proposed such multiple creations for mammals in 1777 and the idea persisted on and off into the nineteenth century when Louis Agassiz proposed separate creations for such animals as the rheas of South America, the ostrich of Africa and the emu of Australia. Multiple creations eliminated the problems posed by dispersal from the ark across inhospitable countries and gave rise to intensive studies of local faunas to find static patterns of distribution. Independently created regional floras and faunas were patterns on the globe: qualitative study would reveal the essence of living associations; quantitative study, the natural laws.

Major figures, like Alexander von Humboldt (1769-1859) and Augustin de Candolle (1778-1841), invented botanical arithmetic, correlating physical attributes of the globe with its living inhabitants. Johann Forster, who accompanied Cook on his second voyage, calculated that the further an island was from the mainland - or the smaller it was - the fewer the species it would contain. The French entomologist Jean Lacordaire calculated the number of insect species per genus at different latitudes, as Candolle had done for plants. However, William Swainson (1789-1855) curious geological patterns, to static electric and magnetic fields, to oscillating fields, and to impacts.

In order to become a quantum chemist of either variety, or even to understand what they are saying in order to assess their opinions, a chemist needs to be familiar with the basic groundwork of quantum mechanics. This includes the standard problems involving the three fundamental types of motion (translation, rotation, and vibration) and the way they make their appearance in chemical processes. The latter include the motion of many electrons in the field produced by many nuclei, which may themselves be in motion, and the transitions between the states of motion that provide the basis of spectroscopy.

Professor McQuarrie's book is an excellent, lucid, straightforward account of quantum chemistry which

the globe changed. In other words, the places where different kinds of plants lived were also determined by local terrains and climates. But it was Charles Lyell (1797-1875) who introduced the idea of gradual and continuous change in the Earth's features. And this uniformitarian geology required the introduction of the time factor.

Pattern and process fused in the nineteenth century. Even a creationist, like Edward Forbes (1815-1854) recognized the time element in the living world. For him, the history of life was made up of consecutive floras and faunas - having boundaries in time as well as in space. His polarity theory visualized creation and expansion and diminution followed by new creation and expansion. More successful fusion of pattern and process came with the application of evolutionary theory to biogeography, notably in Charles Darwin's *Origin of Species* and Alfred Wallace's *Geographical Distribution of Animals*. That, according to Janet Browne, was the end of an era.

The *Secular Ark* is a very personal slice of biogeographical history, as the author herself admits in the preface: "a series of incidents and themes that interested me". Thus, theories are highlighted which are not often discussed, like Karl Willdenow's plant origins from separate mountain peaks and the theory of representative species, today's convergent species. Lesser-known biogeographers, however, are given a place in history: botanists like Robert Brown, who contributed to the statistical theory of centres of origin; and Hewitt Watson, who not only calculated the proportions of particular plants at different altitudes in Scotland but also laid the foundations for a map of the British flora.

Although this is not a complete history, there is enough in the book to provoke discussion among experts and stimulate the uninitiated.

Wilma George

Wilma George is a fellow of Lady Margaret Hall, Oxford.

Private lives of molecules

Quantum Chemistry
by D. A. McQuarrie
Oxford University Press, £20.00
ISBN 0 19 855710 8

Quantum chemistry has a multitude of faces. Some would regard it solely as an exercise in computational subtlety and sophistication, with the various aims of establishing an elusive molecular structure, predicting an important molecular characteristic, or merely chipping a millisecond off here and achieving another decimal place there in calculations on molecules now so heavily investigated that their structures hold no secrets.

Others regard it as a keyhole into the private lives of molecules. Their aim is to understand the manner in which molecules go about their business, and in particular how they respond to their environments. The world of molecular behaviour is one of incessant perturbation, and the quantum chemist, the chemist armed with quantum mechanics, sets about discovering how molecules respond to varieties of disturbance - to static electric and magnetic fields, to oscillating fields, and to impacts.

In order to become a quantum chemist of either variety, or even to understand what they are saying in order to assess their opinions, a chemist needs to be familiar with the basic groundwork of quantum mechanics. This includes the standard problems involving the three fundamental types of motion (translation, rotation, and vibration) and the way they make their appearance in chemical processes. The latter include the motion of many electrons in the field produced by many nuclei, which may themselves be in motion, and the transitions between the states of motion that provide the basis of spectroscopy.

Professor McQuarrie's book is an excellent, lucid, straightforward account of quantum chemistry which



Fifth-century seated pottery figurine from coastal Ecuador. Taken from *Ancient South Americans*, a collection of essays edited by Jesse D. Jennings and published by Freeman at £18.95.

will provide much of the information an undergraduate chemist should be told, and not much that he should not. His text is based on a third-year American college course, and in Britain would be suitable for second-year undergraduates with a normal amount of unsophisticated calculus. It owes much of its content to the material in Pauling and Wilson's classic text (and, it must be said, it is not too far removed from it in epoch): the presentation is in a similar style and at a similar level. The development is entirely in terms of the Schrödinger equation, and the sequence is standard: exact solutions, approximations, atoms, molecules, molecular spectroscopy. The book has many problems (with answers), worked examples, and an extensive rogue's gallery.

There are, however, idiosyncrasies. At the most trivial level, readers may find the mannerism, and sometimes the tedium, of the section headings (for example, "An SCF-LCAO-MO Wave Function - Is Formed from a Linear Combination of Atomic Orbitals Where the Coefficients...") both bizarre and irksome. But if you regard them as a kind of summary printed before their time, they become acceptable. At a more serious level, readers might share my amusement that group theory is ignored. No theoretical chemist is properly educated without an ability to deploy symmetry arguments.

The absence of group theory is serious, but the omission does not mean that the book is useless. Far from it, for its lucidity is its strength and group theory can always be imported from elsewhere. People considering it as a course textbook, however, will have to consider another and more elusive trait which some will regard as serious and others not: the material is presented in a deadpan (but not insensitive) manner, one entirely devoid of attempts at physical interpretation. It is a book with neither frills nor thrills. If you share my belief that chemists should have their physical insight formed and sharpened by interpretation as well as exposition, then

you will not find satisfaction here. But if you seek a clear exposition of straightforward calculations well presented and largely within the range of second-year undergraduates, then you would not go far wrong with this text.

P. W. Atkins

P. W. Atkins is a university lecturer in physical chemistry and a fellow of Lincoln College, Oxford.

Memory systems

Elements of Episodic Memory
by Endel Tulving
Clarendon Press: Oxford University Press, £17.50
ISBN 0 19 852102 2
Memory in Animals and Humans: some comparisons and their theoretical implications
edited by Andrew Mayes
Van Nostrand Reinhold, £23.50
ISBN 0 442 30524 9

It is now more than ten years since Tulving drew to the attention of psychologists the distinction between memory of the events from our own lives and our memory of the knowledge we have acquired about the world. As Tulving points out, this distinction has long been popular with philosophers and the desirable genealogy can be traced back to Aristotle. Nevertheless, psychologists have treated the distinction with caution, even though the terms episodic and semantic memory, which Tulving introduced, have become part of the vocabulary of memory research.

The problem is whether two separate memory systems exist or whether one system manages to cope not only with those memories of personal significance which are so important to

each of us but also with mundane facts - for example, that birds have feathers and can fly. In Tulving's first extended argument defending the distinction, he proposes 28 ways in which the two systems differ. To which he adds a chapter on empirical evidence for his case.

Unfortunately, this will not stop the critics, who will argue that of course, even though memory for personal experiences and semantic knowledge will differ in certain features such as whether they are retrieved by cues about the time and place that the original experience occurred, this does not require a separate memory system. They merely represent two of the many varieties of things we can remember.

Also, much of the empirical evidence is unconvincing, as it rests on tasks which Tulving calls semantic, but which are really just recognizing strings of letters as meaningful words. Since such recognition must precede recall from either episodic or semantic memory and since Tulving himself later implies that he believes that these differences come from changes in what he calls procedural memory (which is responsible for skilled actions) rather than semantic memory, much of his evidence will pass the sceptic by. Even so, the presentation of the case for the episodic/semantic distinction will encourage those, like myself, who believe that memory for personal experiences has been too frequently neglected. As Tulving remarks, the experiences of recollection should be central to the study of memory, but they are virtually never mentioned by psychologists.

It is a pity that the recollective experiences which Tulving discusses in the second part of his book, in which he reviews his research over the past 15 years, are based entirely on remembering that certain lists of nouns have been seen before. Although Tulving defends the use of word lists, it is hard to believe that they capture the dimensions of personal memories of the real world. One of the attractions of the book is that some sections, set in different type, contain anecdotes about his research and speculative comments on other topics. Will these, like lecture-takers' jokes, be remembered when the rest of the book is forgotten?

Whereas Tulving tries to divide the domain of memory research, Mayes attempts to draw together not only animal and human studies, but also physiological and developmental processes. The general result seems to be eight solid, reliable reviews of the chosen areas, although some chapter titles may reflect the optimism of the editor over expected contributions rather than the intentions of the author. Michael Gruneberg's chapter, for example, is largely about the feeling of knowing an answer when it cannot be recalled rather than a review of "Memory processes unique to humans".

Although I cannot get excited about facts like "Alpha-adrenergic antagonists have an opposite facilitatory presynaptic effect on noradrenergic function to that of the opiate", I would agree that eventually a full account of memory should incorporate the description of the system's performance and the physiological processes underlying it. Even so, this book continues to show that, as Mayes concludes, there has been "a tendency to underestimate the difficulty of relating animal behaviour to the underlying hypothetical processes involved in memory".

For many years the study of human memory was inhibited because it was believed that the principles of classical and operant learning being studied in animals could explain all that was necessary. We now know that this was grotesquely unfair to the animals as well as to humans. The problems of matching human and animal memory tasks always run the risk of a parody of one of the other. That those who are interested in both animal and human memory should continue to seek for a unified model is praiseworthy.

Although there is much seeking still to do, Mayes remains confident. The chances are, he concludes, that "in 25 years' time a book of this kind will be able to sketch firmly the answers to the major questions concerning human and animal memory". Perhaps he is right. At least this book helps to clarify the questions.

Peter Morris

Peter Morris is lecturer in psychology at the University of Lancaster.

Colleges of Technology

Strathclyde Regional Council
Department of Education
GLASGOW COLLEGE OF TECHNOLOGY
SENIOR LECTURER 'A' IN COMPUTER STUDIES

Salary Scale - £12,228-£13,572-£15,411.

Applicants should have either a higher degree in Computer Science and a substantial on-going research interest or a relevant degree, appropriate industrial experience in systems analysis and information systems design and teaching experience at degree level or equivalent in this area. The Senior Lecturer post may subsequently carry the designation of reader.

LECTURER 'A' IN ELECTRICAL AND ELECTRONIC ENGINEERING.

Salary Scale - £23,113-£12,228 (Bar) - £13,125.

Applicants are invited from suitable qualified persons, preferably with qualifications and/or experience in modern electronics, particularly in microprocessor engineering, languages and software engineering. Duties might include course design, course management, research and teaching at degree and diploma levels.

Application forms from the Establishments Officer, Glasgow College of Technology, Cowcaddens Road, Glasgow G4 0BA (Phone 041-332 7080), to whom applications should be returned within 14 days of the appearance of this advertisement.

E. Miller, Director of Education.

**ROBERT GORDON'S INSTITUTE OF TECHNOLOGY, ABERDEEN**
SCHOOL OF HOTEL AND INSTITUTIONAL ADMINISTRATION**DEPUTY HEAD OF SCHOOL/SENIOR LECTURER**

with appropriate academic and professional qualifications and industrial and teaching experience for duties as subject leader in Hotel, Catering and Accommodation Management Studies for Degree Course in Hotel, Catering and Institutional Administration.

Salary range: £12,228 - £15,411 per annum.

Assistance with removal expenses.

Details from Secretary, Robert Gordon's Institute of Technology, Schoolhill, Aberdeen, AB9 1FR. (0224 633011).

Lothian Regional Council

NAPIER COLLEGE OF COMMERCE AND TECHNOLOGY
LECTURER A IN ACCOUNTING

Salary on Scale: £23,113-£12,228 (Bar) - £13,125

required to teach financial accounting, management accounting, taxation and auditing to full professional standard degree level.

Applicants must hold a professional qualification and an appropriate degree and have, preferably, some teaching/industrial experience in the subject area.

LECTURER A IN OPERATIONS/ PRODUCTION MANAGEMENT

Salary on Scale: £23,113-£12,228 (Bar) - £13,125

required in the Department of Management to lecture in the subject areas of Operations and Production Management to a range of courses up to and including graduate and postgraduate levels, and to assist in the development of the subject area.

Applicants should possess an honours degree or equivalent professional qualifications and preferably have had industrial, research or teaching experience in one or more of the following areas: operations management and control, production management, materials management, physical distribution, logistics management.

Application forms and further particulars from:

The Administrative Officer (Personnel)

Napier College of Commerce and Technology

Colinton Road, Edinburgh EH10 5DT

Tel: 031-447 7070

Research & Studentships

Northern Ireland Council for Educational Research

The Northern Ireland Council for Educational Research, which is located at the Queen's University of Belfast, invites applications for a research appointment at the level of:

RESEARCH OFFICER OR RESEARCH FELLOW

An appointment of Research Officer level will be within the Council's permanent establishment. An appointment at Research Fellow level will be available for a two-year period from the 1st January, 1984. Candidates should have a good academic background in education or a related discipline, a training in research methodology and, for appointments at the level of Research Officer, proven experience in the research, supervision and reporting of research.

The salary scale for the post of Research Officer is £2,970-£14,127. The salary for a Research Fellow post is £3,970-£15,091.

Further details and an application form may be obtained from the Administrative Officer, The Northern Ireland Council for Educational Research, 10 Victoria Road, Belfast, BT5 5SS. (Tel: 091-276 5000). Applications should be returned by 1st November 1983.

**The Institute of Chartered Accountants in England and Wales.****RESEARCH ASSISTANT OBJECTIVE TESTING**

(re-advertisement)

A research assistant is required, initially for two years, to help the Examination Section of the Institute's Education and Training Department with:

- identifying the accountancy knowledge and skills suitable for assessment by Objective Test techniques
- preparing testing and analysing objective test items and papers
- establishing procedures for setting and marking objective test papers
- developing training programmes

Applicants should have a degree in education or psychology (or the equivalent) and a working knowledge of statistical methods and associated computing techniques. Experience with similar research and development would be an advantage.

The project may be appropriate work for a higher degree.

Initial salary will be in the range £7,500 to £9,800 pa depending upon experience. From March 1984 the Department will be in the Institute's new offices in Milton Keynes. Until then it is at Goswell Road, London EC2.

Application forms from: Mrs P. French, Personnel Officer, The Institute of Chartered Accountants in England and Wales, Chartered Accountants' Hall, PO Box 433, Moorgate Place, London EC2P 2BJ

Miscellaneous

Overseas

Education plays an important role in our future plans**Director of Nurse Education III**
Salary £11,820-£13,889

At Maidstone we are developing our education facilities and nursing services with the aim of establishing Maidstone as an Authority that can offer comparable facilities to other leading hospitals. Our progress is reflected in our Department of Nurse Education, our new nucleus-designed District General Hospital and our management philosophies.

Because we believe in individualised patient care we have developed a management structure based on four care groups rather than on individual hospitals. Each care group will be responsible for the entire range of health care offered to the patient, from first admission to hospital right through to care at home in the community. The success of this depends greatly on the interaction of Research, Education and Practice in patient care and we believe that the professional development and training of nurses is as much the responsibility of managers and individual practitioners as educationalists.

Thus the role of Director of Nurse Education is a crucial one at these times as we attach great importance to the development of education on an academically robust activity. In fact, we believe you should be an educationalist first and a nurse second in order to promote education throughout the District's hospitals and nurseries a spirit of continuous training and professional development of both qualified and learner nurses.

You will be based at the Department of Nurse Education, which is situated close to the new District General Hospital. The School has superb modern facilities and offers general and psychiatric training for the register and the roll and post-basic courses in Ophthalmology and ENT. Although you must have an SRN qualification and a recognised Nurse Teaching qualification you may not be actively involved in nursing or nurse education at present - we are more interested in ability and potential. You must also be committed to further developing existing educational links with the University of Kent.

If you feel you have both the experience and idealism to put education first in order to promote the best possible standards of nursing, please contact Paul Wilson, Chief Nursing Officer on Maidstone (0622) 70161, Ext. 2027.

For application forms and job description please contact: Mr C. Cook, Senior Nurse Personnel, Maidstone Health Authority, Preston Hall, Broomfield, Maidstone, Kent, Closing date: 15th September 1983.

Health Authority, Preston Hall, Broomfield, Maidstone, Kent, Closing date: 15th September 1983.

HEALTH AUTHORITY

University of Bath
Dissolved Type Composite
Studies in a Cryogenic
Chamber with Swirling
Flow

RESEARCH OFFICER

A Research Officer is required to take part in a project funded by SERC (under the supervision of Professor P. J. Yeh). The project involves the design, construction and commissioning of a cryogenic chamber with swirling flow. The chamber will be used to study the flow of a liquid in a rotating container. The project is of international importance and the successful candidate will be expected to make significant contributions to the project. The position is for a period of two years, with the possibility of extension. The salary is £12,228-£13,572-£15,411 per annum. The successful candidate will be expected to have a degree in a relevant subject and experience in the design and construction of cryogenic equipment. The position is for a full-time post.

The appointment will be for a period of two years in the first instance. The salary is £12,228-£13,572-£15,411 per annum. The successful candidate will be expected to have a degree in a relevant subject and experience in the design and construction of cryogenic equipment. The position is for a full-time post.

Application forms from the Personnel Officer, University of Bath, Bath, BA2 7AY, quoting ref. 15/83. Closing date: 15.9.83.

Personal

IMMEDIATE ADVANCES £100 to £500.00. Written on request. Regional firm. 31 Dorset Street, Weybridge, Surrey TW20 2JL. Tel: 0181 891 2634 or 0181 891 547.

HYPNOTHERAPY. You wonder how soon you can solve your problems, as weight, smoking, phobias, etc. Call: 0181 400 5851.

Overseas continued

THE LADY DAVIS FELLOWSHIP TRUST
PO Box 1255 Jerusalem 91904, Israel**Fellowships for 1984-85**

at the Hebrew University of Jerusalem or the Technion-Israel Institute of Technology, Haifa

GRADUATE AND POST-DOCTORAL FELLOWSHIPS

ELIGIBILITY: Lady Davis Fellows are selected on the basis of demonstrated excellence in their studies, promise of distinction in their chosen fields of specialisation and qualities of mind, intellect and character.

APPLICATION INFORMATION: Graduate candidates may apply during their senior undergraduate year or after they have undertaken study in a graduate school. Post-doctoral candidates may apply not later than three years after completion of their doctoral dissertation.

The Fellowships are tenable for one year but may be granted for another year. The grant covers travel, tuition fees and reasonable living expenses.

VISITING PROFESSORSHIPS

are intended for candidates with the rank of Full or Associate Professor at their own institution. They are tenable from one trimester (or semester) to a full academic year. **DEADLINE:** Completed forms in all categories must reach Jerusalem not later than 1st December, 1983. Late applications will not be considered. Candidates including Israelis abroad, may obtain application forms at the above address. Please indicate category of Fellowship required.

UNIVERSITY OF CAPE TOWN
Lecturer in Printmaking and Lecturer in Graphic Design

Applications are invited for the above posts, vacant from 1 January 1984. Appointment will be made according to qualifications and experience. The salary scale is R2 657 to R20 587 x 830-822 173 per annum. In addition, a service bonus of approximately one month's salary is payable annually.

1. Lecturer (Printmaking)
Candidates should have an expert knowledge of all forms of printmaking with a special emphasis on etching, linocut and silkscreen, plus photo-applications in the above and repro-techniques. Teaching experience at a university level is essential. A portfolio of creative work must accompany the application.

2. Lecturer (Graphic Design)
Teaching experience at a university level and/or experience in creative design work is required. Experience in typographic layout and design would be desirable. Design creativity is essential. The University offers excellent staff benefits including 75% remission of tuition fees for dependants of UCT, generous study leave privileges, a housing subsidy scheme subject to State regulations, pension fund, medical aid and group life insurance.

Applicants should submit a curriculum vitae, stating present salary, research interests and publications, the date duty could be assumed, and the names and addresses of three referees whom the University may contact. Further information may be obtained either from the Secretary, SA Universities Office, 278 High Holborn, London WC1V 7HE or the Registrar (Appointments Office), Department of Education, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa, by whom applications must be received not later than 30 September 1983.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request.

Institute for Advanced Study
School of Historical Studies
Princeton, New Jersey**FACULTY POSITION**

Applications or nominations are invited for a professorship in the School of Historical Studies. The School is looking for an outstanding scholar in the field of medieval studies, and only senior scholars of established international reputation will be considered. The responsibilities of the professor will be to carry out scholarly work and to select both permanent colleagues and visiting members to the School of Historical Studies. Salary is competitive with the highest ranges at comparable institutions.

Send, no later than November 1, 1983, a written letter of application or nomination, indicating curriculum vitae, and any further comments to Dr. Henry Hall, Director, Institute for Advanced Study, 304 LSA, Princeton, New Jersey 08540. All correspondence should be sent to the Director, Institute for Advanced Study, 304 LSA, Princeton, New Jersey 08540. The Institute is an equal opportunity/affirmative action employer.

THE HEBREW UNIVERSITY OF JERUSALEM
Jerusalem, Israel

The Hebrew University of Jerusalem offers a small number of:

POST-DOCTORAL FELLOWSHIPS

for the 1984-85 academic year in the Humanities, Social Sciences, Natural Sciences, Agriculture and Medicine.

Candidates may apply at an early stage of their professional career (not later than three years after completion of their doctoral dissertation) to PO Box 1255, Jerusalem 91904, Israel. Completed application forms must be returned by 1st December, 1983.

UNIVERSITY OF NATAL
Department of Political Science
Durban, South Africa

Applications are invited from suitably qualified persons regardless of sex, religion, race, colour or national origin for appointment to the post of:

PROFESSOR OF POLITICAL SCIENCE

Salary in the range: R23 106 to R30 255 per annum. The commanding salary notch will be dependent on the qualifications and/or experience of the successful applicant. In addition, a service bonus of 93% of one month's salary is payable annually.

Application forms, further particulars of the post and information on pension, medical aid, group insurance, staff bursary, housing loan and subsidy schemes, long leave conditions and travelling expenses on first appointment are obtainable from the Secretary, South African Universities Office, 278 High Holborn, London WC1V 7HE or the Registrar, University of Natal, King George V Avenue, Durban, 4001, with whom applications, on the prescribed form, must be lodged not later than 15 October 1983 quoting the reference 010265.

Appointments will be for three years and two years respectively starting in 1984 and 1985. Starting salary will be up to £20,000 pa, on the basis of a 10% increase on the 1st January 1984, according to qualifications and experience.

Previous candidates need not re-apply.

Applications, with full curriculum vitae and the names and addresses of three referees, should be sent to Professor G. H. Hall, Department of Political Science, University of Natal, King George V Avenue, Durban, 4001, as soon as possible, from which a shortlist of candidates can be obtained. HT

University of California
Los Angeles**FACULTY POSITION - FALL 1984**

The Architecture Department at the University of California, Los Angeles, is seeking a full-time faculty member to teach and supervise graduate students in the field of architectural history. The successful candidate will be expected to have a PhD in a relevant field and to have taught at the university level. The position is for a full-time post. The salary is competitive with the highest ranges at comparable institutions. Send, no later than November 1, 1983, a written letter of application or nomination, indicating curriculum vitae, and any further comments to Dr. Henry Hall, Director, Institute for Advanced Study, 304 LSA, Princeton, New Jersey 08540. All correspondence should be sent to the Director, Institute for Advanced Study, 304 LSA, Princeton, New Jersey 08540. The Institute is an equal opportunity/affirmative action employer.

UNIVERSITY OF NATAL
Department of Mathematical Statistics
Durban, South Africa

Applications are invited from suitably qualified persons regardless of sex, religion, race, colour or national origin for appointment to the post of:

LECTURER

Salary in the range: R12 657 to R22 173 per annum. The commanding salary notch will be dependent on the qualifications and/or experience of the successful applicant. In addition, a service bonus of 93% of one month's salary is payable annually.

APPLICATION INFORMATION: Graduate candidates may apply during their senior undergraduate year or after they have undertaken study in a graduate school. Post-doctoral candidates may apply not later than three years after completion of their doctoral dissertation.

The Fellowships are tenable for one year but may be granted for another year. The grant covers travel, tuition fees and reasonable living expenses.

Appointments will be for three years and two years respectively starting in 1984 and 1985. Starting salary will be up to £20,000 pa, on the basis of a 10% increase on the 1st January 1984, according to qualifications and experience.

Research & Studentships cont**University of Newcastle Upon Tyne**
Wolfson Research Group for High-Strength Crystalline Polymers**POST-DOCTORAL RESEARCH ASSOCIATESHIPS**

Two Research Associateships are available for work on:

- (1) Applications of transmission electron microscopy to the study of the structure and properties of crystalline polymers. The successful candidate will be expected to have a PhD in a relevant field and to have taught at the university level. The position is for a full-time post. The salary is competitive with the highest ranges at comparable institutions.
- (2) The development of new materials for use in marine environments.

Appointments will be for three years and two years respectively starting in 1984 and 1985. Starting salary will be up to £20,000 pa, on the basis of a 10% increase on the 1st January 1984, according to qualifications and experience.

Previous candidates need not re-apply.

Applications, with full curriculum vitae and the names and addresses of three referees, should be sent to Professor G. H. Hall, Department of Political Science, University of Natal, King George V Avenue, Durban, 4001, as soon as possible, from which a shortlist of candidates can be obtained. HT

REMINDER

Copy for Classified Advertisements in the THES should arrive not later than 10am Monday preceding publication

General Vacancies

Commonwealth Secretariat

EDUCATION PROGRAMME, HUMAN RESOURCE DEVELOPMENT GROUP
has vacancies for:**CHIEF PROJECT & PROJECT OFFICERS**

Applications are invited from suitably qualified Commonwealth nationals for posts in the Education Programme of the Human Resource Development Group which seeks to offer an integrated and multi-disciplinary response to the needs of Commonwealth governments in the broad area of skill development. In addition to the Education Programme, other Programmes within the Group comprise Fellowships & Training, Management Development, Medical, Women & Development and Youth.

What makes a professional contribution to the constituent Programmes of the Group, the Education Programme's own activities include the organisation of international conferences of Commonwealth Ministers of Education and of specialists; the promotion of collaborative programmes of training and institutional development; the collection and dissemination of educational information; and the provision of technical assistance to member countries.

(a) CHIEF PROJECT OFFICER (TECHNICAL & VOCATIONAL EDUCATION)
£16,836-£18,824 pa

A good university degree or recognised equivalent in a technical or vocational subject, preferably with pedagogical training qualifications. Experience at a senior level in developing and implementing programmes and/or industrial training in a Commonwealth country or region.

(b) CHIEF PROJECT OFFICER (HIGHER EDUCATION)
£16,836-£18,824 pa

A good university degree or recognised equivalent; a postgraduate degree would be an advantage. Academic or management experience in higher education (university or non-university sectors). Experience in developing and implementing programmes in higher education involving international co-operation would be of particular value.

(c) PROJECT OFFICER (DISTANCE LEARNING/NON-FORMAL EDUCATION)
£13,092-£16,080

A good university degree or recognised equivalent as well as a professional pedagogical qualification, preferably in a field relevant to distance learning and non-formal education. Experience at a senior level in developing, operating and managing distance learning systems and/or non-formal education programmes. Familiarity with current research and development work in these fields and with their applications in different countries.

Successful candidates will be responsible to the Director of the Education Programme through the Assistant Director. They will be required, in their respective areas of technical and vocational education, higher education, and distance learning/non-formal education to identify and assess priority educational needs in Commonwealth developing countries; to formulate and implement co-operative projects and training programmes; to undertake consultancy assignments in member countries; to supervise commissioned research and staff studies for publication; to assist in organising and conducting Commonwealth education conferences and regional training courses and workshops. Study or work experience in one or more developing Commonwealth countries would be an advantage.

Appointments are normally for an initial period of two to three years. The starting salary in each range depends upon qualifications and experience, and is subject to deductions of United Kingdom Income Tax and National Insurance contributions. No allowances are involved except as related to duty travel.

Written applications giving full details of qualifications and experience, together with the names and addresses of three referees, should be submitted by 14th October, 1983 to:

Chief Personnel Officer
Commonwealth Secretariat
Marlborough House, Pall Mall, London SW1Y 5HX
Telephone: 01-339 3411

CLASSIFIED ADVERTISEMENTS

TO ADVERTISE IN THE THES PLEASE PHONE JANE MCFARLANE ON 01-253 3000

THE TIMES HIGHER EDUCATION SUPPLEMENT
Priory House
St. Johns Lane
London EC1M 4BX

NATIONAL INSTITUTE FOR CAREERS EDUCATION AND COUNSELLING (NICCE)
(sponsored by The Hatfield Polytechnic and CRAC)

requires for 1 January 1984 (or earlier) a **DEVELOPMENT OFFICER**

to take major responsibility for the work of a 12-month support project for the Career Guidance Programme. The project has been commissioned from NICCE by the Open Tech Unit at MGC (in support of the development of policy options for the provision of guidance and counselling in and around the Open Tech Programme. A background in guidance and/or open learning is essential; research experience would be an asset.

The project is based in NICCE's Training and Development Unit (Post School) and could be suitable for a secondment (or possibly for a person working freelance).
Salary: £10,816 (L II Point 7).
For further details and application forms contact: John Miles, NICCE Training and Development Unit (Post School) at Bedfordbury House, Lower Bedford Way, London WC1R 4EJ. Tel: (0694) 59001.

Don's diary

Monday

The gun cotton looks perilously dry. Perhaps I should respray it before I pack it in aluminium foil. Taking our Chemistry Show on the road is one thing - flying across Canada with a suitcase of clandestine explosives is another matter entirely. How will the security men at Victoria airport react if they find the gun-cotton?

We have travelled with the show before, of course. But always by road, never air. Now I face a three-hour flight to Winnipeg, not knowing if I can even bluff my way through security and get out of Victoria. Still, it will be good to leave the routine of University for a few days (even if I have to spend it in jail on some suspected air piracy charge). So, along with two-foot hypodermic needle, coke bottles taped against explosion, and our muffs, I'll pack my squash racquet and swimming trunks.

Tuesday

Up early for last-minute packing. Check the gun cotton again. It needs to be only slightly damp, or it will never dry out in time for the show. But the aluminium packages seem as dry and light as a vol-au-vent. So I spray the cotton, repack them in nitrogen-filled vacuum bags and head out to the airport. Mary, who will join me later in Winnipeg for the show, chats cheerfully on the way of mid-air explosions. Then I sit moodily in the airport bar, pondering where Canada's equivalent of the Siberian salt mines might be.

On to the plane, where my neighbour is a pot-bellied Albertan oilman in cowboy boots out to raise cash in Victoria. I know little about oil; and, regrettably, even less about millionaires, so I struggle to keep up my end of the conversation.

Off at Edmonton to change planes. Disoriented to find the airport ankle-deep in snow, even though it had been shirt-sleeve weather in Victoria. This bodles ill for Winnipeg, which is generally accepted as having the fiercest climate of any city in Canada. Feel foolish now for packing the swimming trunks.

But Winnipeg, though cool, is dry. At least my squash racquet may get some use.

Wednesday

Log my suitcase of equipment to the University of Manitoba, the location of Thursday's show. My contact, a 19-stone physicist amiable in all respects, is a huge, I am constantly afraid he will trip over something and crush me. He is genial, but unable to supply most of the chemicals I need. I set up in the corner of an undergraduate chemistry laboratory and leave, planning to return early tomorrow. Back downtown I stumble unexpectedly across W H Smith (not far from Marks & Spencer). Surprisingly I purchase the Beano and Dandy, not having seen them for at least ten years, and sneak them back to my hotel room.

Later I must go to the airport to meet Mary, but first I find a cinema showing *Chariots of Fire*. There is an audience of four, myself included. One elderly lady sobs gently throughout the film; the two others discuss it in strange whispers. The film is a delight in spite of them. At the airport Mary, young against the backdrop of complaints of various ailments (understandable) to chat her up on the flight. I am more concerned that she has successfully manoeuvred her share of our equipment into the Air Canada officials - we now have half of what we need for tomorrow night's show.

Thursday

Early to the university to prepare for the evening show. We have an intimate audience when we discover the gun cotton has not dried overnight. With some (unconvincing) information to dry out Mary quickly withdraws a Ukrainian stewardess's wig, and we are left with the "gun-cotton" for the show. The wig is a success. The show is a success.

tirelessly all day for us, ferreting out equipment and chemicals. By late afternoon all but the gun cotton is ready. I gingerly ignite a portion of each wad as a test. One wad leaps unaccountably on to the floor and sets fire to the linoleum. No one is watching and we quickly put it out.

We start the show before a large audience of teachers. Mary's nerves lead her to commit an immediate and blunder as she explains the "Hindenberg" balloon (of which we are about to ignite a small version), was designed by Hindenberg. Stunned silence. When someone shouts "Zeppe-lin", Mary recovers her wits and makes an aside to the effect that she was just checking the teachers' general knowledge. To my astonishment they are taken in and laugh. Everything then runs smoothly until the last experiment, which, as I had feared, rapidly blankets the room in grey smoke.

The campus police arrive with commendable speed. The air conditioning was turned off at 5pm, they tell us, so there is no way to get the smoke out. It has now drifted gently like a fog throughout the building. Mary and I are taken aback at suddenly being presented with honorary membership in the Science Teachers Association of Manitoba for "services to science education". We wonder later what the university thought of that. One of their garbage containers filled with our waste chemicals unexpectedly will catch fire in the middle of the night.

Friday

Off to the Science Teachers' Conference to give a seminar. Flattered to find an overflowed audience. Not that they all agree with me. One lady clearly thinks I am deranged when I suggest science teaching can be improved by an electron or atom; she obviously knows an electron can never be exactly located and is concerned for her own safety.

Retire to lunch clutching a partly-used bottle of red wine left over from the seminar. Immediately discover we are the only table in a seating of 500 to have wine. I quickly distribute the contents around the others at the table (in coffee cups) and hide the bottle under a chair.

In the evening Mary and I go, in some doubt, to a "gourmet party". We need not have worried; about the food at least. Mary is fascinated by the "little black bubbles". On being told it is caviar, she decides she is out to be one of the beautiful people. I go to bed delightfully full.

Saturday

A much-anticipated day of relaxation before returning to Victoria. In 10 years in Canada I have never attended a Canadian Football League game. Today will be the day. All the downtown ticket agencies are out of tickets; the only remaining ones are at the game. In a bitter game I struggle out to Winnipeg stadium. By the time I get there, all tickets are gone. Blown back into town, I arrive unexpectedly at the best restaurant in Winnipeg. My spirits rise and I go in. They are fully booked. The hotel pool is closed today without visible cause, so in the evening I retreat to my room and watch *The Rise and Fall of Reginald Perrin*. It is cut off in the middle for a programme on what we need for tomorrow night's show.

Hugh Cartwright

The author teaches in the Chemistry Department, University of Victoria, British Columbia, Canada.

When freshmen at Clarkson College of Technology in upstate New York go to school this fall, they will become the first students required to own a computer as a prerequisite for entry. Paying an additional \$400 a year on top of regular fees, students will be issued a computer which they will own by the time they leave. There are no exceptions - no matter what the course of study the student pursues. Other schools, such as Carnegie-Mellon University in Pittsburgh, are also planning to require that all freshmen purchase a computer.

Once again, the American education system has latched on to what some feel is only the latest in a long line of fads promising a revolution in learning. From first grade up, computers are seen as a machine that can raise the nation above educational mediocrity.

No longer confined to a world where technicians in laboratory coats hover over temperamental equipment in air conditioned rooms, computers now daily touch our lives. Computers are versatile, powerful tools that connect us globally and also keep a child mesmerized for hours in front of a blinking screen.

Recognizing, if only vaguely, the increasing role computers are playing, schools and colleges in America are placing a growing importance on this technology. Nobody knows for sure what influence these machines ultimately will have, if any, and nobody wants to be left behind, just in case.

Educators in this country are hurriedly grabbing up the machines with a buy now, plan later attitude. Increasingly, the quality of a school is being judged by the number of terminals in place. Never mind if teachers are underpaid or if plaster is falling from the ceiling, deliverance is at hand. One school recently told a member of the Carnegie Foundation's staff: "The first question parents ask is, 'Do you have a computer in the school?'"

A survey completed several years ago reported that about one in every three tax-supported schools in the United States had at least one microcomputer or computer terminal available for instructional use by students. Since then, the number of school computers has been increasing at a dramatic rate.

Still, the trend is spotty and uneven. Math classes use computers more than other classes, and male students use them more than females. Further, hardware, there are substantially fewer computers in schools than in schools serving more affluent households.

A 1982 survey of American public school districts concluded, "Schools with higher proportions of poverty level families are less likely to use microcomputers than are the wealthiest schools". In 1981, the difference

Keeping a finger on the off switch



Ernest Boyer

between the wealthiest and the poorest school districts with instructional computers was nearly 18 percent. A year later the gap had grown to slightly less than 26 percent.

This last finding is particularly disturbing. It supports the claims of those who fear that the computer revolution may bypass disadvantaged students. Children of the well to do will have access to the new information channels while children from poor homes that do not have the latest personal computer, video recorders, and the like, will remain poor in information. They will fall further behind in the struggle for equal opportunity.

Computers look like the perfect teachers. They never forget, are endlessly patient and provide exactly the same information for every student. They can teach addition and advanced calculus with equal ease. Moreover, students attracted by the novelty of the electronic teacher, seem to take to their studies with a renewed interest.

But, like all good education, it is what's being taught that counts and most of the so-called software available to schools is rote and dull. Program material often does not give students the opportunity to go outside the narrow confines of the uninspired program, and frequently it is not connected to school curriculum.

While stating that computer instruction can free a teacher from repetitive drills, Karen Shelnoff of The Bank Street College concludes that "...one has to look at a sampling of these activities to raise questions about the content, the pedagogical approach, the formats and even the errors in some of the programs that are being used."

In effect, the book is designed but the words are left unwritten.

Computer companies here have heavily lobbied Congress to make deductible. Corporations donate expensive equipment to schools, assuming apparently that little computer users will grow up to be big computer buyers. But the school market is only 1 per cent of total sales, thus providing the computer firms with little incentive to develop quality education programs.

Yet, educators remain convinced that computers are an indispensable tool of the future. Computers do have potential that has yet to be tapped. The flaw is not in the technology, but in how it has been applied. Whether the new electronic teachers enrich the schools will depend on whether programs are well prepared, whether teachers are made partners in the process, and, above all, whether schools have an education plan before they purchase equipment.

The challenge is not to view computers as the enemy; nor is it to convert the school into a video game factory. Rather, the challenge is to build a partnership between traditional and non-traditional education, letting each do what it can do best.

The potential of technology is to free teachers from the rigidity of the syllabus and tap the imaginations of both teacher and student to an extent that has never been possible before. Today, teachers and school librarians can take instructional materials - film, videocassettes, computer programs - and fit them appropriately into the curriculum. Such programs can help students study on their own.

In the long run electronic teaching may provide experiences more effective (certainly different) than traditional teachers. The promise of the new technologies is to enrich the study of literature, science, mathematics, and the arts through words, pictures, and auditory messages. To achieve the goal, technology must be linked to school objectives.

But computers cannot teach students wisdom. That is the mission of the teacher and the classroom must be a place where the switches are sometimes turned off.

Above all, the classroom should be a place where students are helped to put their own lives in perspective, to put out the bad from the good, the shoddy from that which is elegant and enduring. For this we need teachers, not computers.

The author is former United States commissioner of education and president of the Carnegie Foundation for the Advancement of Teaching.

The problem with dealing with problems

In the last few weeks, readers of *The Times* have had an interesting juxtaposition of reports and comments on the work of two commissions in different national contexts: first, the editor's analysis of the legacy of the Robbins Commission report and its impact on the British higher education system; second, the report of the American National Commission on Excellence in Education with its recommendations for improving elementary and secondary education.

I would like to comment briefly on both reports, not in terms of their substance, but more on the impact. In one case, probable in the other, of each commission's work and the factors which influence such impact, with special attention to the role of organized groups in higher education.

The Robbins Report is the landmark in post-war British higher education. Although you may now debate whether Robbins is still the guiding policy for British universities and colleges and one must certainly admit that the subsequent binary system was an important change in the Robbins plan there can be no doubt that each and every policy change in higher education since Robbins has been measured by the Robbins rule. What was it about Lord Robbins and his commission which made its impact so enduring?

I should like to list three factors which contributed to Robbins' impact: first was the eloquence of the report and the directness of its recommendations; second was the thread which tied continuity with the past to a real vision of the future, which was a justified departure from some established patterns of provision of higher education; finally, the agreement of most of those in higher education and the leaders across British politics that the university system must expand if Britain were to meet the challenges of the postwar era and also provide greater equality of opportunity.

Our report on educational excellence offers both contrast and complement when measured by the Robbins report standard. The National Commission's report is more succinct and its recommendations are clear.

There is no new vision of the future in this report; instead it is more a plea for restoration of past practices, with a few innovations drawn from imperfect understanding of other national systems, including the British.

Finally, there is agreement across our political spectrum and across levels of education about the need for restoration of standards, but there is great disagreement about the details of the strategy and about the role of government and its financial support in achieving the goals. On balance, we cannot expect our National Commission on Excellence to lead a historical change or even to testify to one in the manner of the Robbins Report.

Those of us who teach in universities in the US and the UK are facing different challenges as we respond to these major reports or their legacies.

Irving J. Spitzberg, Jr

The author is general secretary of the American Association of University Professors.

LETTERS TO THE EDITOR

Graduating to hard times and castles in the air

Sir, - Liz Wells reminds readers of the Letters page (*THES*, August 26) of the hard times often had by graduate research students in humanities and social science: at the beginning, optimistic selection of a vast and probably boring topic; then a year or two of easy-going supervision; unanticipated difficulties, personal and intellectual; and further years extending into more years of tutelage, expensive and dispiriting, to a piece of work that you no longer really care for. Eventually, you don't even get the degree.

Middlesex Polytechnic has just begun a scheme to help students get round these problems. The graduate research diploma in humanities is awarded for a very short thesis (15-25,000 words), completed in 18 months, part-time, with close and constant supervision in which particular attention is given to the inevitable frustrations of sustained academic writing. The experience should enable students to make an intelligent choice of topic for further work for a higher degree - provided, that is, that their insight into the life of the research student has not put them off completely.

Yours faithfully,
JONATHAN REE,
The Graduate Centre,
Faculty of Humanities,
Middlesex Polytechnic.

Sir, - Lord Wilberforce chancellor of Hull University in a ceremony on July 29 to mark the 150th anniversary of the death of the emancipator, William Wilberforce, praised the fight for freedom by his ancestor.

The freed won for the slaves by Wilberforce does not exist for post-graduates of Hull University who pretest against the arbitrary demotion of higher degrees without any definite reason being given. They are not allowed to state their case in person but are tried by a secret tribunal against which there is no appeal.

A slave could be held in bondage for life. The career and life of a postgraduate

length of degrees. (One is forced to ask if the usual gestation period of the dinosaur is two years.) I mean the palpable absurdity of this suggestion must be glimpsed even by us, must it not?

At a time when our international competitors enter their higher education stages at least a year older, with more equivalent A levels (and OF COURSE that means nothing in itself either) and stay for as long as it takes to make them well cooked, before graduating them, we intend, if I am correct in understanding all the gobbledegook to package our lot burned black outside and runny raw inside.

Especially in the design part of that ludicrous conglomerate by which we refer to two totally different activities, this cannot be reconciled at all with the noises, both blasts and bleatings, that were heard from the last government about the importance of good design to successful selling (and I do not share that government's view that that is the objective of good design, by the way).

We have an educational system that, in concept, was created for an Empire from which we have pulled all the raw materials we required into our own manufacturing maw to regurgitate as products and by-products to an awaiting (if unwilling) market. We do not have any of these three critically associated factors any more, neither the raw materials, nor the manufacturing system, nor the guaranteed market; yet our educational systems are the same. Phew! Thus, frankly, what on earth is

the good, let alone use, of asking the barren knights about the degree scenario?

It is well known that any collection of humans made to focus too long upon a complexity will, sooner or later, attempt to reduce it into smaller simple components. . . as if by doing so its very nature of complexity may be altered. It is rather like associating two headlines in a newspaper reporting that the incidence of rape has increased rapidly over the last two months and that after his eight week visit the Archbishop of Bosnia-Herzegovina is returning home exhausted. (Back to Snow-Leavis, art-and-design, science and arts yet again. . .)

Nash would hope, it would quietly assert that if there is not enough cash in the kitty to offer degree level education to everyone, then there are at least two alternatives, not just one as the Wise Men imply; and that one of them is that it just might be better to raise the entry standards by selection rather than lower the qualification on leaving. I, for one, simply cannot see the trauma of that. Even the loathsome politicians will, in time, recognize the ridiculous idea that a country must invest most fully in its only guaranteed natural resource, its people!

Yours faithfully,
GILES TALBOT KELLY,
Head of the department of design,
Teeside Polytechnic,
Middlesbrough.

SSRC suspicion

Sir, - I am sure many social scientists would have read with interest that the Department of Trade and Industry has invited the Social Research Council to handle the £100,000 research programme into ways of encouraging acceptance of new technology. Given that the government has made heavy cuts in the SSRC budget over the last few years, it is perhaps not surprising that the announcement has been greeted with some suspicion. What exactly is this initiative? How much information it is difficult for social scientists to make a reasoned appraisal. I should like therefore simply to make three comments.

First, at a practical level, the complete work of the kind alluded to under the research project headings in about 18 months looks to be a very difficult proposition. How is this to be concretely accomplished?

Secondly, it would be useful to know what guidance is being given to potential research applicants. There are many social scientists in a range of disciplines who have a research interest in this area. Perhaps it would be helpful if the SSRC published more details in the pages on *The Times*. Some constructive comments could then be sent to the SSRC from interested members of the social science community.

Thirdly, according to Dr Cyril Smith of the SSRC the contract is seen as an important test for social science. What kind of test is it and how will we know if we pass or fail?

I hoped I had made it clear in answering your questionnaire that this department is concerned not only with politics but also with social policy and social history. The bulk of its external funding is

Yours sincerely,
JOHN ELDRIDGE,
Department of sociology,
University of Glasgow.

Extramural policy

Sir, - Should universities make separate provision for their continuing education role? Your lively report (*THES*, August 26) on the discussion during the Commonwealth Universities Conference at Birmingham, includes three different answers. It will be most interesting to see what the report of the UGC Working Party on Continuing Education has to say about this. Meantime, the universities have already given a tacit answer in that the great majority have set up

Part-time lecturers

Sir, - I refer to Mr Gilbert Rockett's letter (*THES*, August 26) in which he alleges that this university relies on part-time lecturers in the summer term. The language of Mr Rockett's letter is immoderate (what on earth is "freelance moonlighting") and his charge unjustified.

In accordance with its educational policies, the university provides generous levels of full-time staffing throughout the year. Input by part-time staff represents only a modest proportion of the total. Like other universities, we find that high quality visiting academics and practitioners enrich the situation and extend the range of

Brunel money

Sir, - Your peer review (*THES*, August 5) of politics departments stated that the London School of Economics received only £90,000 in external funding research over the last three years, while Brunel received only £400,000. I hoped I had made it clear in answering your questionnaire that this department is concerned not only with politics but also with social policy and social history. The bulk of its external funding is

Yours faithfully,
MAURICE KOGAN,
Head of the department of government,
Brunel University.

ate, denied a higher degree, is also held in thrall by dictatorial academics who are answerable to no one.

Yours faithfully,
ALISTAIR J. WILSON, MSc,
37 Derrymore Road,
Willesborough,
Hull.

Sir, - Barry Adams (*THES* Letters, July 29) believes he has the solution to the postgraduate problem I think he is too modest. His excellent scheme has much greater scope. International legislation can be introduced forbidding war, poverty and starvation. This, "and other steps" will end all the world's major problems. Everyone will be happy, all postgraduate students will get their PhDs and the skies will be filled with "natural justice" and other mythical creatures gambolling gaily from castle to castle.

It must now be the duty of the NAB board to throw out the report which produced these lunacies and produce something more realistic, based on common sense rather than the statistical mumbo jumbo which appears to be such a marked feature of the work of the Technical and Data Group.

The proposals as they stand are quite unacceptable to this association and will be equally so to the rest of the public sector.

Yours sincerely,
CECIL ROBINSON,
President,
National Association of Teachers in Further and Higher Education.

Sir, - Your front page analysis (*THES*, August 26) rested, as you made clear, on a confidential report prepared by the Department of Education and Science. You failed to make it clear, however, that the report did not contain target student number figures; in consequence, both the headline and the initial inference drawn in the article are wrong. Of the 29 polytechnics in England, 25 are being consulted on a student number target larger than their present student population, and for 20 of them, the figure is also larger than they proposed.

The debate about student numbers, and about the balance to be sought between access and the unit of resource, has already featured in your columns. Because student numbers are going up, and the money available is not, the unit of resource is going down. In consequence, a college with more students in 1984/85 may receive less money from the pool in the later year: the financial analysis which you featured illustrates this.

I should add three further points: - present consultative exercises are a part of the planning exercise; we expect some of our proposals to change as a result of it, both in respect of student numbers, and, consequently, of proposed financial allocations; the exercise has principally been carried out on an individual college basis given this, we regard the notion of a polytechnic subsector and a polytechnic "share" of numbers (or money) as relatively meaningless and certainly unhelpful;

nevertheless, the significant role of major institutions in the local authority sector, in terms of their quality and balance of work, and their contribution to national provision, has been taken into account in our work, as the figures in my first paragraph demonstrate.

The position of the polytechnics in the consultative proposals is so different from that implied in your article that I hope you will feel able to give the contents of this letter equal prominence.

Yours faithfully,
JOHN S. BEVAN,
Secretary,
National Advisory Body for local authority higher education.

Mr Rockett implies that most of Buckingham's academic staff are away in the summer. This is not the case. Teaching staff are with us for three of our four terms. They take their annual term's study leave as teaching needs and the syllabus requires. Leave terms are planned far in advance, and are spread throughout the year.

I can assure Mr Rockett that Buckingham maintains a very high degree of academic integrity.

Yours faithfully,
SIMON ELLIS,
Registrar,
The University of Buckingham.

for studies in the fields of educational policy and social history. These do not, incidentally, consist for the most part of survey work. Quite a few small grants, however, have been made to members of the department for political science research.

Yours faithfully,
MAURICE KOGAN,
Head of the department of government,
Brunel University.

No winners in NAB 'bingo'

Sir, - The report which appeared on the front page of *The Times* on August 26 can only cause horror and despair to those who look to the National Advisory Body to help create the stability so desperately needed by public sector higher education.

Your headline suggests that, in determining the allocation of the pool, NAB is playing some highly sophisticated game of Bingo where there can "winners" and "losers" selected apparently, almost at random.

There can however be no winners in a system which produces such wild year-on-year variations in college budgets or such discrepancies in funding between one part of the public sector and another.

It must now be the duty of the NAB board to throw out the report which produced these lunacies and produce something more realistic, based on common sense rather than the statistical mumbo jumbo which appears to be such a marked feature of the work of the Technical and Data Group.

The proposals as they stand are quite unacceptable to this association and will be equally so to the rest of the public sector.

Yours sincerely,
CECIL ROBINSON,
President,
National Association of Teachers in Further and Higher Education.

This year's congress will have to do some very deep heartsearching on the question of talking to Mr Tebbit and consider possible responses to future legislation which will restrict our abilities to defend the rights of members.

The AUT delegation naturally has to represent a wide and diverse political membership and so we have always attempted to influence policy where the Association has expressed its clear wishes through our representative council.

This year we have two motions. The first suggests that the balance between military and civil research and development is wrong and asks for a major transfer of funds to the civil sector and appointments particularly to the universities so as to go some way to restoring the imbalance of research funding.

The other motion will be calling on the TUC to reject the Department of Education and Science estimates of future demands for higher education places based on demographic changes and seek to persuade the government to consider a real policy on student access instead of hiding behind cash limits and population graphs.

During the past year the TUC general council has submitted evidence to the University Grants Committee working party on continuing education and will be meeting UGC officials in the autumn. This statement reaffirms the TUC's view that access to continuing education will only be expanded if grants and study leave from employment are made available as of right to all employees.

There are many who will decry the TUC as undemocratic and unrepresentative and chief among these critics will probably be the modern Conservative party. But, as will be apparent from your television screens, congress is a good deal less stagelike than the Conservative Party conference.

Last year, as is the tradition, the TUC was held at the fashionable Regency resort of Brighton and spent a lot of time building castles in the air.

In the cold reality of the north-west, congress is likely to come back to earth and accept that it needs a fundamental reexamination of its message and the ways of getting it across. The association will be adding its voice to this review.

This country has always had a fine tradition of dissent and acceptance of democratic opposition and the TUC has always played an important role in putting forward the views of those who actually keep our society going.

Yours faithfully,
Diana Warwick
The author is general secretary of the Association of University Teachers.

Union View

Room with a view of the sea

For the Association of University Teachers, as well as academic institutions, September is the start of a new session. But instead of returning from the seaside we will actually be setting out for northern shores and, I hope, a room with a view.

When the AUT delegation arrives at Blackpool for the 115th Trades Union Congress, it will be the eighth time that we have taken part as an affiliated union. The delegates at the TUC this year represent a total membership approaching 10.5 million from the whole field of employment and sadly, now, unemployment.

How is it, you may be wondering, that unions with such diverse interests and views can get together and express some common purpose?

Much of the work of the TUC goes on out of view of the television cameras, though not necessarily in smoke-filled rooms! The TUC is an opportunity for the trades union movement to get together once a year to share problems and suggest solutions.

This year's congress will have to do some very deep heartsearching on the question of talking to Mr Tebbit and consider possible responses to future legislation which will restrict our abilities to defend the rights of members.

The AUT delegation naturally has to represent a wide and diverse political membership and so we have always attempted to influence policy where the Association has expressed its clear wishes through our representative council.

This year we have two motions. The first suggests that the balance between military and civil research and development is wrong and asks for a major transfer of funds to the civil sector and appointments particularly to the universities so as to go some way to restoring the imbalance of research funding.

The other motion will be calling on the TUC to reject the Department of Education and Science estimates of future demands for higher education places based on demographic changes and seek to persuade the government to consider a real policy on student access instead of hiding behind cash limits and population graphs.

During the past year the TUC general council has submitted evidence to the University Grants Committee working party on continuing education and will be meeting UGC officials in the autumn. This statement reaffirms the TUC's view that access to continuing education will only be expanded if grants and study leave from employment are made available as of right to all employees.

There are many who will decry the TUC as undemocratic and unrepresentative and chief among these critics will probably be the modern Conservative party. But, as will be apparent from your television screens, congress is a good deal less stagelike than the Conservative Party conference.

Last year, as is the tradition, the TUC was held at the fashionable Regency resort of Brighton and spent a lot of time building castles in the air.

In the cold reality of the north-west, congress is likely to come back to earth and accept that it needs a fundamental reexamination of its message and the ways of getting it across. The association will be adding its voice to this review.

This country has always had a